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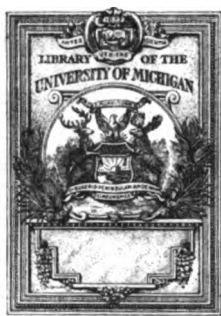
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ORIGINAL COMMUNICATIONS

Latent Sinusitis

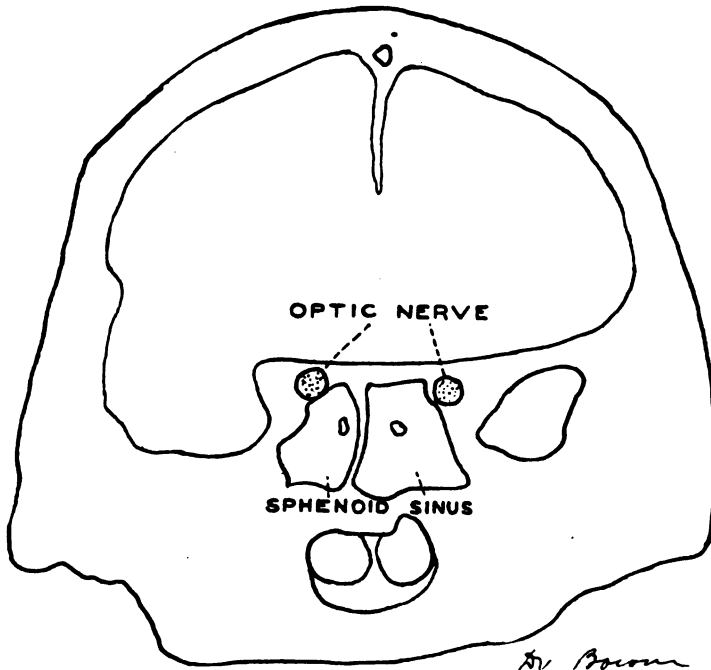
By GEORGE F. COTT, M.D.
Buffalo, N. Y.

THE four sinuses of the skull, frontal sinus, ethmoid cells, sphenoid sinus and antrum of Highmore, have been made the subject of many papers. The antrum of Highmore, however, held the field against all comers and was referred to the dentist mostly, as properly belonging to his field for treatment; and perhaps justly so, since so often the antrum became infected through the root of a tooth. About twenty years ago, however, during the epidemic of American grippe so aptly described by Carl Seiler in Burnett's Otolaryngology, conditions changed. The other sinuses became more involved and were left crippled to give further trouble years later. The immediate effect of the epidemic was to leave the cell cavities denuded and the nerves exposed lying upon the bone unprotected by their periosteal covering which left them in a condition readily to be acted upon by some peculiar irritant in the air. The apparent causative factor is a mixed infection not due to the influenza or grippe germ. In our city, as observed by me since the first epidemic, the antrum of Highmore became the offending organ a number of years after the epidemic. Pus was invariably found upon opening that cavity, always denuded of its membrane, and at times foul granulations and quantities of polypoid degenerations were removed, with uniformly good results. After the antrum disease had run its course the ethmoid cells became troublesome and for several years they received apparently exclusive attention. Then that subsided and the frontal sinus came into play. The sphenoid then showed considerable unrest and was heard from next with all its dire consequences. During 1910 the maxillary sinus again became very prominent in surgery. In other parts of the country the rotation was not so exact as I have noticed it, the different sinuses receiving attention from time to time and had to be radically treated.

Disease of the sinuses is far more common in the adult than in children because, first the sinuses are not so fully developed

in the young, and secondly they seem to be more or less immune as compared to the adult; per contra, the child suffers much more frequently from involvement of the middle ear from disease of the throat thru the Eustachian tube than does the adult.

The sinuses are located as follows: Frontal sinus in the frontal bone, its inner wall forming part of the outer wall of the cranial cavity. It communicates with the brain by blood vessels perforating the inner plate.



RIGHT OPTIC NERVE MORE EXPOSED THAN LEFT

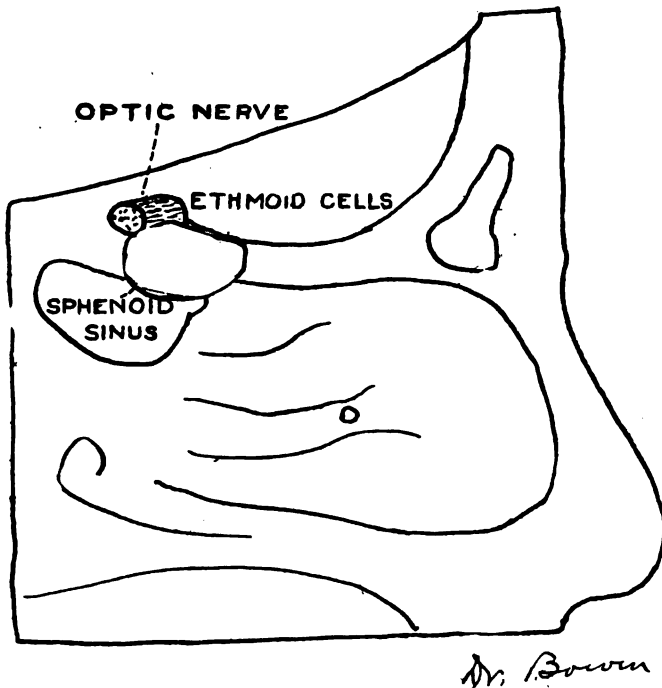
The ethmoid cells are located immediately under the frontal lobes in the median line, the separating cortex being very thin and perforated by numerous foramina for the olfactory nerve. The anterior and posterior ethmoid arteries and nerves also penetrate the bone.

The sphenoid sinuses are located in the body of the sphenoid bone separated from each other by a thin bony septum. They are very irregular in shape; the one often differs from its fellow of the opposite side. All these sinuses occur in pairs. The optic nerve runs close by the sphenoid sinus and sometimes encroaches upon its cavity, as will be noticed from the plates.

The antrum of Highmore lies in the superior maxillary bone and its outer wall forms the prominence of the cheek; its inner

wall—thin plates of bone—forms part of the outer wall of the nasal cavity and its roof is composed of the orbital plate. The second branch of the fifth nerve runs along in a groove under the orbit and occasionally penetrates its plate.

These different sinuses are covered with periosteum and mucous membrane. They all open into the nose, as follows: the frontal sinus through the infundibulum opens into the middle meatus; the anterior ethmoid cells and the the antrum of Highmore likewise into the middle meatus.



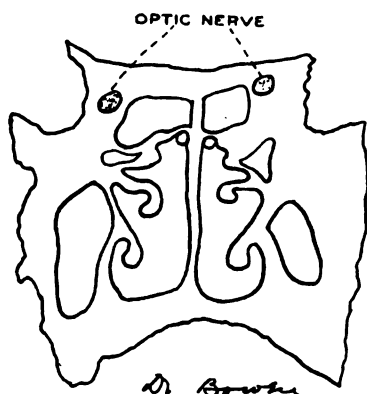
OPTIC NERVE AT MARGIN OF POSTERIOR ETHMOID CELL

The posterior ethmoid cells open into the superior meatus with the sphenoid sinus. Thus it will be seen that infection can readily enter any or all of these air spaces thru their natural openings.

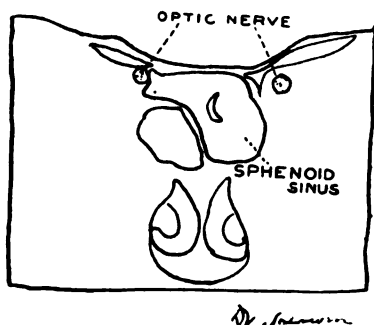
These spaces are natural cavities in the bones of the skull and are developed as follows: The frontal sinus is absent at birth, develops about the 7th year of life and gradually increases until the age of 20. They are often unequal in size and vary in extent in different individuals. Some are very small on one or both sides and sometimes extend away up into the frontal bone. The cavities may contain trabeculae of irregular size.

The sinuses are separated by a septum which may contain an opening. Occasionally they communicate with a cell in the Crista Galli. In a few cases it has been noticed that the sinuses are not developed at all.

The ethmoid cells are not developed until the fourth year, excepting perhaps the rudimentary bulla and another small space. The outer surface of the lateral mass of the ethmoid is formed by a thin plate of bone called the os planum or lamina papyracea and forms the inner wall of the orbit. In some cases this plate of bone never develops and the sinuses are separated from the orbit by membrane only.



BOTH NERVES OUT OF DANGER
ZONE



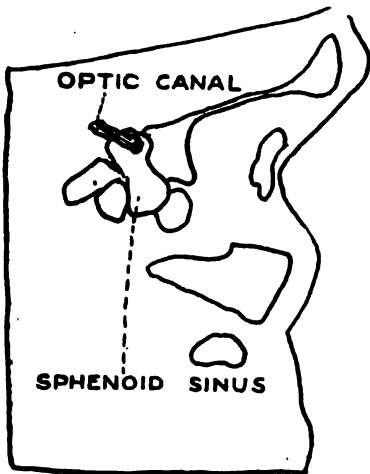
ONE NERVE IN DANGER OF INFECTION

The sphenoid sinuses do not exist in early childhood but develop after the seventh year, or from that to the twentieth. Occasionally one sinus or both may be absent. In his investigation Onodi has found thirty-eight varieties of sphenoid cells, that is in shape, size, location and difference between the two cavities. One may be very much larger than the other. They increase in size as age advances. They have been found to extend in the pterygoid process and base of the greater wing of the sphenoid bone or extend into the basilar process of the occipital bone nearly to the foramen magnum (Gray).

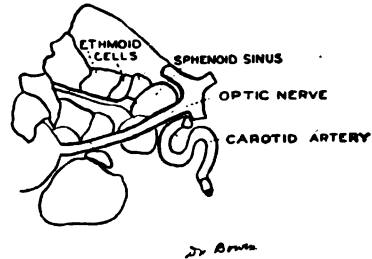
The antrum of Highmore is rudimentary at birth and gradually increases to its full size at puberty.

I have gone into some detail regarding the anatomy of these sinuses because operations are so frequently performed upon them by surgeons and near-surgeons. If the peculiar and varied shapes and sizes of the different cavities are not borne in mind some avoidable accidents with most serious consequences are apt to follow.

To come back now to the diseases which commonly affect the sinuses. The antrum of Highmore was mostly infected from carious roots of teeth, occasionally by zymotic disease so commonly affecting the throat and nose; but since the advent of grippe or influenza all other causes have been put into the shade and the millions of sinus cases now extant are by a large majority due to its destructive influence. Those of us who practised during the epidemic twenty years ago know how serious were the cases we encountered daily; pain in back and limbs, nasal rhinorrhoea, after some days formation of pus in profuse quantities in the nose, intense headache to the verge of delirium.



OPTIC CANAL RUNS THROUGH
SINUS



CLOSE RELATION OF SPHENOID
SINUS AND OPTIC NERVE

Since we know more of the effects produced by this virulent poison we can readily explain the source of pain. The dura mater is supplied with nerve filaments from the sympathetic, the 4th, 5th and 12th nerves while the pia mater is supplied by filaments of the 3rd, 5, 6, 7, 9, 10 and 11th cranial nerves, some of these as you will observe are motor nerves, but each one receives sensory filaments from the tri-geminus, glosso-pharyngeal or pneumo-gastric. The effect of pain is not due to brain involvement but to neuritis which may extend throughout the sensory nerve influence, though brain abscess or meningitis has occurred principally when pus was found in the sinuses. In the present state of sinus disease however, we do not always find pus, the sinuses usually being dry, but the nerves exposed and through some peculiar external irritation the mucus mem-

brane of the nose becomes swollen, drainage becomes defective, or, where this is not the case, the peculiar irritation acts upon the exposed nerves without the nasal mucous membrane having become involved primarily and causes neuritis with all its painful and destructive influences.

In the first epidemic, pneumonia was a great source of revenue to the undertaker. Most all patients who had a severe attack of grippe at that time or since and escaped pneumonia and apparently recovered have had some defect which lowered their resisting power. One of these is denudation of the sinuses and exposure of the nerves either one or more, and these lie quiescent until some sort of semi- or quassi-epidemic calls upon this sensory nerve supply to help along the inglorious work of pain. One of the principal symptoms is pain and this is of so intense a nature that the patients have actually been adjudged insane by relatives and advised to have them removed to the custody of keepers. In others there was intense pressure immediately above the eyes, sufficient to keep them from their usual occupation; still others had severe pain on top of the head and others at the base and cerebellum; in some supra-orbital; in others infra-orbital pain of intense character, which nothing relieved. I know of two cases of pain in the second division of the 5th in which finally the nerve had to be drawn out and then the patients did not recover for months afterward. Of the numerous patients suffering now, and during the past year, I have met but three who actually had pus in the sinuses. One of these had pus in all the sinuses which were not influenced by any drainage or washings out, and has since died of tuberculosis, the other two were antrum disease. One complained of foetid discharge, the other of discharge and pain of the second division of the fifth and supra-orbital region. In both the antrum contained foul smelling granulations.

These patients also suffer mentally not to a point of insanity but sufficiently to keep them from attending to business or work. At times during the wet, damp or dusty season they complain of mouth breathing, or of easily catching cold, winding up with purulent discharge. These so-called colds are not easily amenable to treatment but seem to extend over several weeks or months before they can be made to yield. In addition to the swelling of the mucous membrane of the nasal cavities we find the throat affected; this however is usually cursorily only, but the trachea suffers most, and occasionally the bronchi. Recently some feebly resistant patients were furthermore afflicted by developing pleuropneumonia with an accumulation of fluid in the pleural cavity which when withdrawn consisted of blood instead of serum or pus (Buswell). What other phase this terri-

ble scourge will next exhibit we must anxiously await. I certainly believe that in the last twenty years more people died of grippe, or its consequences than many destructive diseases put together, the certificate of death giving the cause as some particular ailment, but fundamentally due to latent grippe.

The principal objective symptom affecting the trachea is intense congestion down to and beyond the bifurcation. The mucous membrane of the pharynx and larynx is generally involved. The subjective symptom is cough, which may occur every few minutes and often spasmodically during the night keeping the patient from sleep. This cough consists more of a bark than anything else, causing pain in the lower chest due mostly to muscular strain and to sensitive nerve areas at the bifurcation, spasm of the glottis, headache and fatigue due to want of rest. Exceptionally is anything raised by the tremendous exertions. This tracheitis often lasts a month or two but finally improves with or without treatment.

The pain can often be traced to branches of the fifth nerve although the glosso-pharyngeal and pneumogastric play an important part in its production. It differs from neuralgia by first being traced to a specific cause and not of that peculiar periodically intense nature affecting a certain nerve but of a constant depressing or pressure-like pain, unless a separate branch is affected when the pain will be so intense that death seems preferable to these patients than to bear it. The pain may show itself in other parts of the nerve not periodically as we commonly find in neuralgia but lasting indefinitely, of varying intensity not at all uniform in character, but in its different varieties lasting over a long period, recurring milder and milder, say for several years. A very important difference between neuralgia and neuritis involving the cranial nerves is the effect of treatment. Neuralgia is obstreperous and obstinate, while neuritis yields quite readily, in many cases immediately and permanently while in others cessation of pain is apparently a remote effect of treatment while in a third class all symptoms vanish to re-appear, mildly or severely for a few weeks then stay away; a few remain severe whenever an attack occurs.

Thus, has been this peculiar cycle of the latent effects of grippe. The antrum of Highmore suffered mostly for several years and was usually only relieved by operation. Following upon this we had a period of ethmoid disease also relieved by operation; then the frontal sinus caused more trouble, and the others seem to have been forgotten, excepting the sphenoid, which lately sprang into prominence and now again the antrum of Highmore. I do not mean that these different sinuses are not in a receptive state but irritation seems by predilection to call

forth symptoms referable to a particular sinus only, or the nerves connected with that sinus.

For purposes of differentiation let us divide the sinus affections into suppurative, hyperplastic and dry stages, the latter being the latent stage or that one following suppuration. The suppurative and hyperplastic stages may and do occur independently while the dry stage always follows suppuration.

The latent stage seems harmless unless called into activity by some irritant. Such patients are susceptible to rapid changes of temperature, to dust and to high humidity. They complain of colds which do not seem to get well. The secretion when present in such cases is viscid and commonly clings to the pharyngeal wall and occasionally the effort to remove it causes vomiting; when abundant it escapes down the oesophagus at night causing indigestion and diarrhea and consequent emaciation in instances to a point of starvation. In another class of cases in this stage the mucous membrane and periosteum have been destroyed and the nerves exposed. Now when drainage has been obstructed, either pneumatic or exudative, there is always a chance for trouble. This may come during subacute attacks or periodical colds or without any apparent cause. The commonest remote effect is neuritis involving principally the fifth nerve. Now if we follow up the distribution of this sensory nerve we readily find an answer for the causation of the severe pain. I do not lay much stress upon the so-called localized meningitis in those cases of long standing but consider them nearly always as neuritis. Compare their actions with nerves inflamed anywhere else in the body; the result is practically the same. Very many patients recover and a few withstand their sufferings for years.

A very important effect of latent sinusitis is blindness. The sphenoid sinus and the optic nerve are very close associates, and may be in actual contact by dehiscence, or weakening of the optic canal where it forms a part of the sinus wall and thereby the nerve easily becomes infected producing optic neuritis and consequently blindness, as I would apply the term deafness, being of all degrees. We may have only certain areas affected which is designated as scotoma, or the entire fundus may have become involved. None of the dozen or so cases which I saw lately were totally blind because the infection is very much milder than that causing pus formation. This blindness seems to come on quite suddenly, perhaps over night and gradually seems to grow worse, usually accompanied by a sense of pressure over the eyes or on top of the head. In a few patients no subjective symptoms were present. The symptoms seem so sudden that fortunately the patient seeks to ascertain the cause of the defect of vision. Nor

is the faulty vision very mild; some cannot distinguish objects across the room while others cannot make them out a foot from the eyes. Where certain fields of the nerve are affected moving objects can only be seen at a certain angle or in an irregular circle in extreme divergence or near the median line then again vanish. Happily the present quassi-epidemic is within our power and patients can usually be relieved by operation; some however have been suffering for several years and were quite or totally incapacitated from work of any kind. Their trouble was not diagnosticated for a long time, but after once located and treated gradually recovered.

1195 MAIN STREET.

Colds—Their Causes and Treatment¹

By **SARGENT F. SNOW,**
Syracuse, N. Y.

EVERY otologist and laryngologist who attempts to handle a chronic case has before him at once the problem of controlling the many acute colds of inflammations that occur in the membranes of the nose and throat.

These inflammatory actions are often so slight that the patient has not noticed them, but we find them so frequently that they interfere seriously with our efforts to the extent that often in ear affections it is unwise to encourage local treatment.

For fifteen years the reader has groped after the cause of these recurring membrane disturbances thinking at first they were caused entirely by morbid intra-nasal states, but later decided that there was always an underlying systemic factor to be held responsible. What exact trouble this was seemed obscure, and it was only since I began a closer study of Auto-Intoxication four years ago, that I have felt I had a sufficient grasp of the situation to say what this systemic factor was.

In opening the subject of head colds I must ask your indulgence for not quoting authorities and literature, as I have been unable to find time to take up the matter from that standpoint. This attempt then can in no way be called classical, but I earnestly ask that the views set forth shall have a few moments of your thoughts.

Auto-toxic colds, colds from self-poisoning, or common colds if you like, in the opinion of the reader is a condition induced primarily by toxic substances developed within our own body, a self-poisoning from our own bacteria, or in other words, a nitrogenous auto-intoxication of microbic origin.

¹ Read at the forty-third annual meeting of the Central New York Medical Association held at Syracuse, October 19 and 20, 1910.

Active inflammation and fever usually mark the limit of toleration by the system for toxic materials. Such an inflammation is an auto-toxic explosion or crisis of elimination; in other words, a *cold* is the expression of an *auto-intoxication* showing itself in the mucous membranes. Those infective inflammations or influenzas produced by bacilli developed outside of the body, as pointed out by Combe some years ago, are more properly termed Intoxications, not Intoxications.

It is now a well accepted fact that our intestinal tract is supplied with digestive bacilli that are capable of becoming very abundant and pernicious if not kept under proper subjection by active secretions from the intestinal mucosa, liver and anti-toxic glands. These three barriers protect the body from the harmful actions of those digestive bacteria while our glands are kept in healthy activity, but if the healthy activity of the intestinal mucosa and liver is impaired, then our body is not producing anti-toxins sufficient to protect us and we become a prey to our own bacteria. The system then becomes Auto-Toxic.

According to Combe on Auto-Intoxication, (see page 9), Marfan is quoted as follows:—"We may say that the microbes intervene actively in all digestive processes, but that besides their undeniably useful role, it is also undeniable that their action transforms the digestive canal, even in the normal state, into a receptacle and constant laboratory of poisons."

It is small wonder then if they overwhelm us when our body functions are torpid or depressed.

Some people appear to possess a remarkable tolerance for toxic accumulation before it is shown in an irritable or inflamed state of the head membranes, while others quickly show such evidences.

In the first mentioned we find them so loaded with toxic materials that we must at once get their emunctories into vigorous action if we save them from a severe sickness, others will respond to a simple clearing out of the intestinal canal.

In active head colds or pharyngeal inflammation we are likely to be forced to unload the system rapidly, not only by the bowels, but by the skin and kidneys. Acid intoxications can be materially reduced by alkaline eliminative solvents. Hot baths and the usual remedies for inducing free perspiration can be made of great help. The whole question becomes one of rapid elimination.

As a rule patients that are auto-toxic frequently take colds and have a holy fear of draughts; observation will soon show that their tongue is coated, breath likely to be foul, whites of eyes dull or yellow, complexion dirty grey and lips too red, or

they will show a history of at least irregular bowel action and more often give a history of chronic constipation.

We need have no fear of draughts or exposure except when we are loaded with enterotoxins or are greatly fatigued. The draught fetish is a constant menace to our well being. It is true that a person saturated with toxic materials is very sensitive to cold draughts and should be protected, but only until the toxic materials can be unloaded, then give him fresh air in wholesale quantities.

While we may have sneezing and a nose stuffed from sitting in a draught, the congestion induced will pass off readily upon moving about, unless the nasal passages are abnormal or the system is toxæmic.

If it should occur that our patient has a nose obstructed and made unduly sensitive by a deflected septum, outgrowth, or turbinal enlargements, the only reasonable procedure is to have these abnormalities corrected. Such intra-nasal defects do not cause actual colds, but they induce such an irritable and occluded state of the respiratory passages, that a very slight systemic disturbance will produce marked and continued symptoms.

Under present modes of diet and life, it is a problem indeed to eat and live so that we do not develop a nitrogenous auto-intoxication. It would seem that the human race either had inherited defective digestive functions, or that our food was far from being the proper sort. Either we must correct the diet or we must anticipate auto-toxic accumulations by administering a glandular stimulating remedy at such intervals as will prevent an auto-toxic explosion or crisis. The author finds it necessary to take such a remedy every ten days or two weeks, even though he lives plainly and has regular movements of the bowels twice a day. Many patients will find it necessary to anticipate such a loading up of toxins by an active stimulant to the liver and upper bowel secretions once a week, some once in two weeks. Such a course gives them protection from *intoxication* through poisons developed *outside* the body, and from *intoxications* through poisons developed *inside* the body. It also soon brings them into a state where a fear of draughts and exposure has become a thing of the past.—Fresh air has become a luxury instead of a menace.—An unwholesome individual has become a being of health and pleasure, not one who insists that every window shall be closed, and his or her associates subjected to the discomforts of a room over-heated and poorly ventilated.

It is repeatedly proven to us that our body in a healthy state is an efficient anti-toxic laboratory. Note the extensive operative work that can be done on the mucous membranes of the head

without subsequent antiseptic dressings being necessary, simply have our instruments clean and the mucous secretions will take proper care of the wound under all ordinary conditions.

Whether an acute rhinitis or head cold comes from a poison developed inside the body, or comes from a poison developed outside the body, like the influenzas, La Grippe, and the like, the treatment can well be along the same lines, the objective point is the same, to subdue pernicious bacteria by augmenting anti-toxic secretions.

A cold is really one of nature's kindest warnings that our body is becoming surcharged with poisons. The head membranes are good barometers of the system, and prompt heed given to their warnings will greatly reduce our death rate and suffering from rheumatism, tuberculosis, appendicitis, acute indigestion, renal and other functional disorders.

If we, as a profession, had already mastered the problems of correct living there would be little need of medicine. If we knew how to select, prepare and apportion our foods but few diseases would bother us, as diseases are largely preventable. We have not solved these problems and will not for many years. The culinary art aims more to tickle the palate than to furnish nourishment, and until greater improvement is wrought along these lines, *Materia Medica* will have to be a succoring angel.

Accepting, then, the fact that to prevent or cure colds we must fight digestive irregularities and resulting toxic activities, we approach these lines of combat in a rational and scientific way.

If our patient is eating too largely of meat and heavy nitrogenous foods, such a diet must be corrected by substituting the proper proportions of lighter starchy foods; if he is overeating, or taking too much fluid with his meals, those things should be looked into, for intestinal putrefaction is frequently caused by such erroneous habits.

Eating too largely of starchy foods causes fermentation in the small intestines; too largely of albuminoids brings putrefaction in the large intestines; each capable of exciting strong systemic disturbances to the end that we must either solve our patient's problems by prevention through correction of diet, or by giving him relief medicinally, and we all know how unsatisfactory medical relief is except as a temporary expedient.

Preventive knowledge is the great goal of our achievement—our ideal course of study—but we must be practical and until we possess that preventive knowledge more completely and can indicate more definitely the correct dietary modes of life, we must rely upon such relief as can be obtained through medicines.

If we are to combat toxic activities we must be armed with anti-toxins, and as our body anti-toxins are produced by our glands and mucosa, we must administer glandular stimulants to make our body manufacture more abundant and active anti-toxic secretions. It is not necessary for me to say what glandular stimulant shall be used, calomel seems to be most efficient, though I use it only in extreme or obstinate cases, preferring as a rule a blue mass and colocynth compound. Whatever is chosen we should be sure is followed by a prompt and copious clearing out of the bowels, and the dose repeated every two or three days until the tongue is clean, the breath sweetened and the complexion less muddy. Recurrences should be prevented by anticipating auto-toxic crises as before mentioned.

It is the author's practise to give a medium dose of castor oil or salines between the doses of glandular stimulant, if the auto-intoxication is persistent or active and calomel has been used, the aim being of course to prevent cumulative effects from the mercurial. Under such a plan of medical treatment I have found no untoward results, on the contrary, am each year more and more satisfied, and often surprised, with the general good such treatment does the patient, besides preventing subsequent membrane congestion.

If we are auto-toxic we take cold easily, if we are not auto-toxic we do not take cold; exceptions to this rule are few, Auto-Toxic colds are common.

I regret exceedingly that there are not more digestive specialists throughout the country to relieve us of these auto-intoxicated patients, but until there are we will have to make the best of the situation. Such cases, with their complex problems, are really subjects for more careful painstaking observations than can be given by a busy operative otologist or laryngologist, particularly so if he attempts to go into the details of diet correction. It is quite easy though to note how often the tongue of our throat or ear patient coats up, complexion becomes muddy, appearances indicate billiousness, and the head membranes take on increased congestion, sure indications that toxins are again accumulating in the system and that we should anticipate the impending crisis by prompt acting glandular stimulant. If such toxic accumulations occur every two weeks, we can wake up the anti-toxic functions a few days earlier, if every ten days, we can give our anti-toxic stimulant once a week, always adapting the medicine to the case.

A glandular stimulant can be given for years with no harmful result if proper combination is used and reasonable care taken that the patient does not take the remedy as a daily cathartic.

The author has used a pill composed of blue mass, colocynth compound, strychnia sulphate and belladonna for ten years, with not one instance of mercurial poisoning, nor one instance tending to show that a constipated habit has been induced. Such a drug combination does not require an after flushing with salines, and as stated earlier in the paper, is sufficiently effective except in extreme or obstinate cases where nothing acts so well as calomel. When a chronic constipation is complained of, some laxative like the Aloin, Strychnia and Belladonna pill can be used each night with propriety.

If we are able to handle and prevent acute inflammation of the respiratory membranes known as common colds by recognizing and treating the patients' auto-intoxication, what may we not hope will sometime be done with the more grave affections? It appears to the author like the dawn of a new era and he hardly dares let his fancy travel.

It is possible yet that the medical practitioner may outstrip his co-laborer, the laboratory scientist, in the race to save life and promote human longevity. Both are engaged in legitimate effort, the one to produce anti-toxins or antigens outside the body for injection in emergencies, the other to induce anti-toxic secretions within the body for immunity and cure.

The Treatment of Syphilis

By W. W. QUINTON, M.D.
Buffalo, N. Y.

THE present status of the treatment of Syphilis is of the greatest interest to the general practitioner as well as to the specialist.

The sale of Erlich's Salvarsan is now unrestricted and if this valuable remedy is indiscriminately and carelessly used we may expect deplorable results.

It has been heralded far and near as a sure cure for Syphilis and demands for its administration will be made by many unfortunates suffering with the disease, regardless whether or not the remedy is indicated.

Even with the most carefully selected cases and the most perfect technic bad results have occurred and these should warn us to regard the use of this drug in a most conservative spirit, relying mainly on the older methods of treatment and using Salvarsan only in cases where it is plainly indicated, meanwhile patiently awaiting the time when careful experimentation shall have taught us the indications and the contraindications of this extremely valuable remedy.

The older methods, when properly applied, have given satisfactory results and the cures resulting while slow have been sure.

What treatment shall we use until the status of '606' has been determined?

Both at home and abroad many authorities look upon the salicylate of mercury as the best drug for ordinary use. It is administered with sterilised liquid paraffin in 10 per cent. strength. The dose is 1 cc. injected into the buttock. This injection is given weekly for ten weeks which constitutes a main cure.

Some patients do not support the salicylate and suffer with severe headache, profuse sweating, ringing in the ears, and the like. In these cases the thymol acetate can be substituted, using it in the same strength.

How long will it take to cure a patient by this method, and when can he be assured that it will be safe for him to marry?

In order to bring about a positive and lasting cure it is necessary that the patient should be under observation for three years. Three main cures are given in the first year, two in the second year and two in the third year. If the patient takes all of the main cures and remains at the end of the third year without symptoms and with a negative Wassermann, he is cured.

The succinimide of mercury may be used instead of the salicylate. It is injected in 1 per cent. solution in distilled water with the addition of a small amount of cocaine to prevent pain. 1 cc. of the solution is injected daily; thirty injections constitute a main cure. This solution must be renewed every eight days.

The difference between the two preparations can be summed up in a few words. Soluble salts of mercury as the succinimide, cause a very quick effect; a large amount of mercury being absorbed in a short time. The insoluble salts, as for example the salicylate, give a slow continuous action during a protracted period.

In cases of brain syphilis, where a very energetic effect is desired, calomel can be employed in 5 per cent. strength in sterilised liquid paraffin. This is one of the most powerful preparations of mercury.

The perchloride of mercury is very speedy in its effects. The objections to its use are that it is very painful, may cause abscess and destroys the needle.

A 2 per cent. solution is administered every other day or a 5 per cent. solution every five days. The disadvantages attending its use are very evident but it should be remembered that in syphilitic apoplexy, gumma of the brain or in arteritis syphilitica a 5 per cent. solution used judiciously may save the patient.

When given by intravenous injection it is not painful and the danger of abscess formation is obviated. A Platino-iridium needle of Merck or Beyer make should be provided.

Énésol which is a combination of arsenic and the salicylate of mercury is a valuable preparation particularly in anemic cases.

It might be well to mention the fact that such a thing as mercurial saturation exists and when this occurs further dosage with the drug will have no effect. In these cases the mercury must be stopped for a time.

If symptoms persist between the cures, other forms of mercury can be given combined with the iodides.

The iodides are always given after each main cure with mercury, as they seem to have the effect of fixing the mercury in the system.

The iodide of sodium is preferred as it is better borne by the stomach. It contains approximately the same percentage of iodine as the iodide of potassium.

The special indications for the use of the iodides are:

1. Pain.
2. Gummatous destruction of the nose or throat, in which case we give the iodides first.
3. Gumma on the leg. The iodides are employed internally and mercurial plaster locally.
4. In cases of mercurial idiosyncrasy.

In the course of treatment with the iodides the patient must be watched carefully for symptoms of poisoning, such as eruption, lacrimation, scratching in the throat, and the like. Eighty per cent. of the patients will sooner or later develop some slight symptoms of iodism but if severe, the iodides must be stopped, for persistence in their administration has caused death.

In severe headache and boneache nothing will prove more beneficial than an injection of a mixture of iodoform and sterilised liquid paraffin 1-10. One, two or three injections of 1 cc. each are given intramuscularly.

Mucus patches are touched with nitrate of silver, or the bichloride of mercury 1-100. When the whole mouth is affected a spray containing 1 part of iodoform in fifty parts each of ether and alcohol will be found beneficial.

For leucoplakia, painting three or four times a day with balsam of peru is strongly recommended.

In all local skin affections mercurial plaster may be employed.

The treatment of the initial lesion calls for a few comments. There is great difference of opinion on this point but it is believed that primary excision of the chancre may prove helpful.

In syphilitic alopecia daily massage with an ointment of ammoniated mercury five parts to fifty will be found of service.

In ozena, peroxide of hydrogen used as a spray will do much towards relieving the condition.

The palmar and plantar lesions can be treated with bichloride of mercury in collodion 1-100.

These and many other methods of treatment have met with success in dealing with the disease but in face of all that is claimed for the new drug, the Erlich-Hata "606" or Salvarsan, they appear slow and ineffectual by comparison.

It must be remembered however, that cases which have received careful and intelligent treatment by the older methods are cured and remain so.

One of the greatest dangers to be apprehended from the new treatment seems to me to lie in the fact that so many patients will expect a "one injection" cure. This injection may clear up all the local lesions and the patients will go their several ways confident that a cure has been obtained, only to report in the course of time with the tertiary manifestations.

The time may come when we shall use "606" to the exclusion of all other methods of treatment but that day has not arrived.

The drug may now be used in certain selected cases in which the presence of the spirocheta has been definitely determined. These cases should be kept under observation for long periods of time and frequently tested with the Wassermann until it is known that a cure has been effected.

Certain phases of the disease will indicate the administration of Salvarsan at the present time, viz:

1. Refractory cases which do not respond to mercury.
2. Relapse following mercurial treatment.
3. Cases with mercurial idiosyncrasy.
4. Those which are continually relapsing.
5. In malignant syphilis.
6. Cases complicated by tuberculosis.
7. For the relief of pain in some cases of early tabes.
8. Hereditary syphilis in infants.
9. In the primary attack, given at the appearance of the chancre, and followed by prolonged and intermittent treatment with mercury accompanied by local treatment of the initial lesion.

The drug, however, must be used with great care. The patients must be selected from those who are otherwise strong and healthy. Cachexia or a weakened constitution will always contraindicate its use. The eye should be normal; temperature and body weight should be determined and the urine examined.

Salvarsan must not be used in old age or in affections other

than syphilis of the kidney, heart, liver, spleen, lung, and blood-vessels, or in grave syphilitic affections of the brain, as recent hemiplegia or acute or subacute meningitis.

It should not be administered in paresis or advanced tabes or to those with advanced degenerative changes of the brain from any cause. Acute febrile disturbances and chronic alcoholism will also act as contraindications.

It would seem that the ideal treatment of syphilis in the future will result from a combined treatment of selected cases with Salvarsan and mercury. The Salvarsan to be given as soon as the presence of the spirocheta has been determined, to clear up quickly the primary manifestations and render the possibility of contagion less likely. Then following this a vigorous intermittent treatment of the disease by mercurial injections with the frequent use of the Wassermann reaction until the patient is cured.

This will insure a shorter period of treatment, the greater safety of those with whom the patient may come in contact and an eventual and lasting cure of the disease.

232 ELMWOOD AVENUE.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

THE GRAND REVIEW.

ON November 20 General McClellan reviewed the larger part of the army of the Potomac at Bailey's Cross Roads, where there was a suitable field, so centrally situated as to be within easy reach of both the right and left wings of the army. The troops participating comprised seventy regiments of infantry, thirty batteries of artillery, and ten or twelve thousand cavalry, in all about sixty thousand men. The President, Secretary of War, and other distinguished public men were present and participated officially in the ceremony. Besides these there were seven Major Generals and twenty-one Brigadiers, with their large and imposing staffs, together with a superb cavalry escort and innumerable bands of music, all contributing to the grandeur and magnificence of the occasion; and when to these are added

the thousands of civilians, many of whom were ladies, who crowded the available space as spectators, it will be readily understood what an interesting picture the scene presented to the eye. The roar of cannon, too, added not a little to its imposing splendor. Finally, when all was ready, the trumpets pealed forth the signal for the start, and this mass of living humanity moved forward at the beck of one man, constituting a pageant of magnificent splendor. This was the largest review of troops ever held on this continent up to this time. The 49th did not participate, but was left in charge of the camps of the division, and to support the pickets if necessary. I went, however, and secured a position opposite the reviewing officers, so I had a good opportunity to see them all. This was the first time I had ever seen President Lincoln; he rode in review in a tall hat, and seemed to take kindly to the self-imposed task, though I fancied he was glad when it was over. Two days afterwards General Smith again reviewed our division, which again ended in a sham battle. The General's wife, a beautiful young woman, rode gracefully at his side, entering with great zest into all the details of the parade.

Dr. Wilcox, Captain Washburn, Lieutenant Adams, and other officers of the 21st visited us on the 24th, and we entertained them at dinner, serving them to roast beef, roast lamb, and the like. They seemed highly pleased with our hospitality, and invited us to visit them in return, that they might reciprocate.

Colonel Alberger and I dined in Washington on Thanksgiving Day, November 28, at Mr. Wells's of Fifth Street. This family were friends of the Colonel, and I was invited as his friend. The 9th New York Cavalry, from Chautauqua County, arrived in Washington Thanksgiving night, and I visited the regiment at Soldier's Rest next morning. I had many friends and acquaintances in that regiment, among them E. H. Wilder, and H. G. Parker, of Varysburg. I escorted some of them through the Capitol and other places of interest.

The 49th had two men wounded on picket December 2, which was our first taste of blood from the enemy. On the 5th, Alderman A. A. Howard, of Buffalo, visited us and spent some time with me. His visits had relations to the settlement of the accounts growing out of the expenses of raising the regiment, and we had to supply the necessary vouchers. About this time we became pretty well convinced that we would remain in Camp Griffin during the winter, and some of us, therefore, commenced to consider the propriety of fetching our wives after the holidays, to visit us for a few weeks. I wrote to mine to make herself ready to come, and that I should send for her by Mr. Harry Harbeck, our sutler, who was a very genial gentleman,

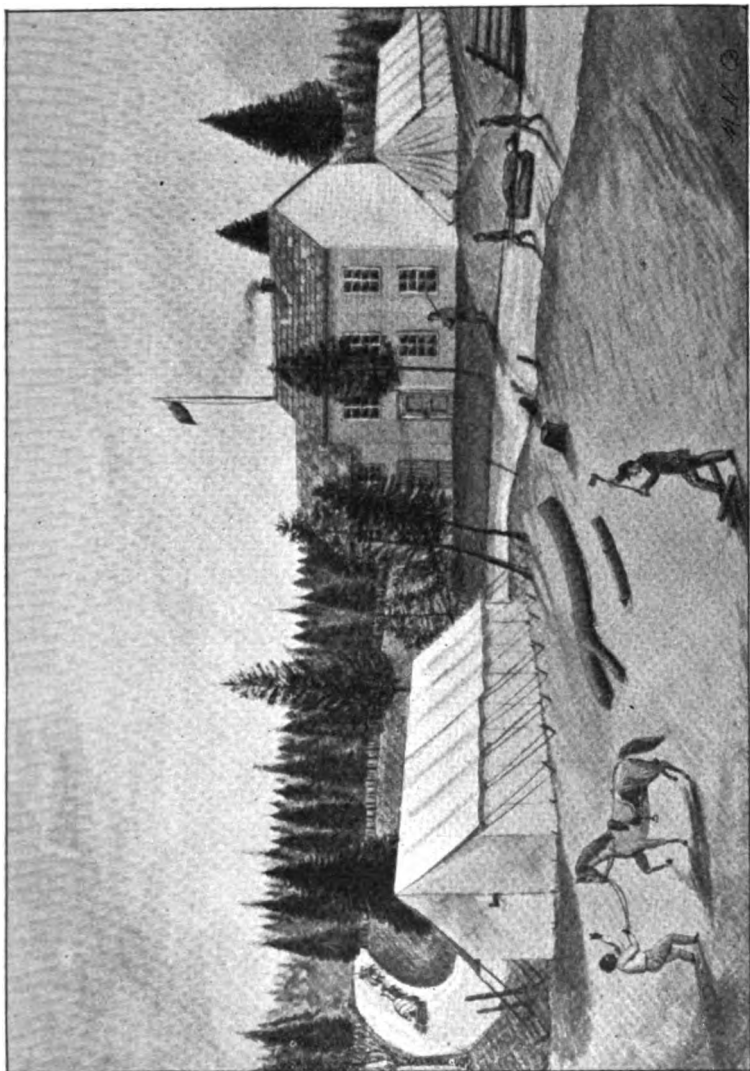
an agreeable companion, and the personal friend of many of us. He intended to start about the 15th, and return near the 1st of January.

Our first death in camp occurred on December 7th. One of the men of Company B, who had suffered with measles, died from the secondary effects thereof. On this day the Honorable Burt Van Horn and wife, of Niagara County, visited us and dined at our mess. On December 6th, the whole division, consisting of thirteen regiments of infantry, two batteries and one cavalry regiment, went out near Vienna foraging, and brought in two hundred wagon loads of different kinds of forage, starting at daylight and returning at seven o'clock P. M.

Our Regimental Hospital had been established at a deserted house, half a mile in our rear on the road to Chain Bridge, since the first of the month, previous to which time it had been a part of the Regimental Camp. On Sunday, December 8, General Brannan inspected the hospital in its new quarters, approved of the general plan, but directed that the assistant surgeon be required to reside with it; accordingly I took up my abode there on the 9th. I have an India ink sketch of this hospital, made at the time by one of the soldiers—I don't recall his name—which is an excellent picture.

On the 10th Colonel Alberger received a telegram from his wife, who was one of the first ladies to move towards paying us a visit, announcing that she had started for Washington. On the 12th, during one of my incursions to Washington, I visited both houses of congress in session; and, as this was the first view I had taken of the national legislature at work, the scene impressed me greatly. As I became more familiar with congress in after years, this early impression of the members and the grandeur of their work was removed, or very much modified. During these days the weather was most charming by day, and the nights even so mild that I did not need a fire. The bands of the several regiments gave evening concerts, filling the air with lively strains of patriotic and other martial tunes, which served to enliven the otherwise dull life that the officers led in the evening. While we were busy in the daytime enough, the evenings, as a rule, wore heavily on our hands at this time.

The good ladies of Cowlesville, N. Y., through Mrs. Bruce Millar and Mrs. Gilman, sent our regiment a very nice box of hospital stores that we received on the 13th. The goods and fruits were turned over to me, and I distributed them among the sick. The officers met, passed appropriate resolutions, and forwarded them to the ladies. I was, of course, one of the members of the committee to do this.



REGIMENTAL HOSPITAL, 49TH REGIMENT N. Y. VOLUNTEERS, CAMP GRIFFIN, VA., NOVEMBER,
1861, TO MARCH, 1862.

Mr. Harbeck left for the North on the 15th and was instructed to fetch Mrs. Bidwell, Mrs. Tillinghast and Mrs. Potter back with himself and Mrs. Harbeck when he should return, which he said would be in about two weeks. The officers of the 9th N. Y. Cavalry—a number of them—dined with us by invitation the day of Harbeck's departure, and expressed much delight with their entertainment, as well as envy that we were to have our wives with us. Mayor Alberger and Isaac Holloway, of Buffalo, visited us on the 17th and the Mayor spent an hour in my tent, where a number of officers called and paid their respects to him.

Rumors of an impending battle filled the camp during these days; and, finally, as if to give verity to the coy Madame, on the 20th the long roll was sounded throughout the camp while we were at dinner. The regiment turned out and was speedily under arms, when orders came for it to march with the other troops of the division towards Drainesville. I started after first paying the sick a visit, which delayed me about half an hour. When near Lewinsville I overtook the Brigade Surgeon, Dr. Herrick, who ordered me back to look after the camps, and to be ready to receive the wounded, should there be any. McCall's division, on our right, had a skirmish with the enemy at Hunter's Mill, killing a number—rumor said sixty bodies were found on the field—and losing a few killed and wounded. Our division went as a support, but was not needed, so it returned to camp in the evening. Colonel Alberger's wife arrived in camp while he was away on this expedition, so it fell to my lot to entertain her until his return. She expressed the hope that my wife would soon come, that she might, by the presence of other ladies, be enabled to spend more time in camp herself. On the 21st, Lieutenant Carson, of North Java, and the 9th N. Y. Cavalry, visited me and remained all night in my quarters. He gave me some interesting news of Dr. Adams, of the gossip at his home, and the like. General Brannan, and his staff of six officers, dined with us on the 21st also, by invitation of Colonel Alberger, the General escorting Mrs. A. to the table. Our dinner was especially prepared for the occasion, and all seemed to enjoy the event, as it lent a little variety to the social part of our life.

On Christmas Day the sick in hospital were furnished a special dinner by Dr. Hall and myself, consisting of oysters, turkies, chickens, and such other delicacies as were thought suitable to the occasion, and to their stomachs. From this time until the end of the year I was busy, during all spare time, with the quarterly return of medical and hospital property, and stores. The return was a complicated and a perplexing one to make up at first; but

I finally mastered it, finishing it on the 31st of December, the last day in the afternoon. That evening my wife arrived, and, as Colonel Bidwell had gone to Washington to meet his own wife, we occupied his quarters that night and during his absence.

1862.

New Year's Day, 1862, was a warm, delightful day—so much so that we spent nearly the whole of it out of doors, without either overcoats or wraps. It was dusty, too, and reminded one of early October at the North. We had a special dinner in observance of the custom as in all well-regulated households; and the day was generally observed as a holiday throughout the army, only the necessary duty being required of the troops.

During the first two or three weeks of my wife's visit we were quartered at the hospital, as I had been before her arrival; but after the middle of January the rains were so constant, that I moved back to the camp again, to avoid walking back and forth to meals in the mud, Dr. Hall taking my place at the hospital. The presence of so many ladies in camp made it quite interesting to the officers and soldiers, who seemed to enjoy this little infusion of home life into ordinary military routine. The ladies, themselves, enjoyed it greatly; the troubles and inconveniences resultant from such restricted quarters they made light of; while they readily took advantage of everything which could be made to contribute to the general good or amusement, no matter how slight or trifling in character it might ordinarily have seemed to be. Evenings were spent in visiting each other, generally one of them inviting all the others, where conversation, singing, and eating, with some card playing served to while away many a delightful hour; and in this way the months of January and February slipped away, all too rapidly.

The latter part of January brought Dr. McCray to visit us, and we enjoyed the week of his sojourn very much indeed. He, likewise, fell into our easy-going ways with alacrity, and departed with regret. We were really a very jolly lot, skimming the cream of the hours as they flew by, and I now look back upon this winter at Camp Griffin as among the pleasantest of my life. We occasionally visited Washington staying for a night and a day; but not often, for we one and all, preferred the novelty of our camp life to the attractions of the capital.

Thus affairs went on day by day until the Ides of March; then came certain premonitions of a probable early move in the way of preparatory orders, but nothing definite until, suddenly, in the middle of the night of Sunday, March 9, an orderly galloped into camp, his horse's hoofs ringing crisp over the hardened ground, with orders to get ready to move immediately. A

little later in the campaign such an order, even in the dead of night, would not have disconcerted us in the least; but now, with all our comforts around us, and our wives still with us, we were startled as out of a dream, and everybody flew around without method or purpose, doing the most unnecessary things, and saying the most disagreeable things imaginable. However, the regiment was aroused, breakfast cooked, and we were under arms at daylight, in waiting for the final order which should send us forth to do and to save. The ladies were left in care of Mr. Harbeck, our good and trusted coadjutor and friend, who took them all to Washington during the day (Monday), while the division marched out as far as Flint's Hill, near Fairfax C. H., and bivouacked for the night, our first day's march covering about twelve miles through the mud. And so we bade this hasty and unceremonious adieu to Camp Griffin, the dear old spot, where we had had so many pleasant experiences, and where we had gone through so much of that tutelage so necessary to make us efficient soldiers.

Our first night at Flint's Hill was a pretty severe trial to me, at all events. I slept in a D'Abri tent for the first time, pitched on a side hill, and but just large enough to permit me to lie down in. I did not take off my clothing that night, even sleeping (?) in my overcoat, hat and spurs. The night was windy and trying, and of course I got but little sleep, fearing all the time we might be roused by orders to move. Finally morning came, finding us all quiet, and we remained at Flint's Hill until Saturday, the 15th of March. On Thursday, March 13th, the Rev. Dr. Sunderland of Washington, and the Rev. Dr. Heacock of Buffalo visited us, the latter remaining all night with his brother, Captain R. B. Heacock, who was killed at Spottsylvania C. H., May 18, 1864. Thursday night we received orders to be ready to move at a moment's notice, and Saturday morning, the 15th, we marched to Fairfax C. H., thence towards Alexandria, camping in the vicinity of the latter at four o'clock P. M. It rained hard all day long and at night we were a sorry lot; but a big camp fire, around which the field and staff pitched their tents, served to cheer and dry us. It also afforded us an opportunity to cook a hot supper, and I enjoyed broiling the fresh beef on a forked stick, which tasted sweeter than though it had been served from Delmonico's grill.

The next day, Sunday, the 16th, I received information that my wife was in Alexandria, whereupon I immediately obtained a pass and visited her at the City Hotel. It appears the ladies remained in Washington for a few days to learn, if possible, what our destination would be, and, upon learning that we were ordered back to the vicinity of Alexandria, they took the boat

over from Washington Saturday evening, sending us word to that effect Sunday morning. The party consisted of Mrs. Tillinghast, Mrs. Bidwell, Mrs. Alberger and Mrs. Potter, and their husbands visited them about noon of Sunday at the City Hotel, as before stated. We remained there until Monday, when I bade my wife good-bye, not to see her again until the last day of the year, December 31, 1862, when I went north for a few days upon my promotion to Surgeon of the 57th Regiment N. Y. Volunteers.

Our command remained near Alexandria for a week, awaiting transportation to Fort Monroe; for McClellan had by this time determined to adopt the Peninsula route to Richmond. On Sunday P. M., March 23, we embarked at Alexandria on the "Arrowsmith," a Long Island Sound steamer chartered for the purpose. We anchored for the night off Mount Vernon, as it was even then not safe to sail down the river at night, on account of the possibility of encountering rebel batteries, setting sail next morning for Fort Monroe, where we arrived the same evening, but did not debark till Tuesday morning. General Davidson and staff came with the 49th on the Arrowsmith. He was our Brigade Commander now, having in January succeeded General Brannan, who had been ordered to the South Carolina coast, taking with him the 47th N. Y. The 77th, Colonel McKean, was assigned to us in place of the 47th, making our brigade consist of the 33d, the 49th, and 77th N. Y., and the 7th Maine volunteers. I took supper Monday evening and breakfast Tuesday morning at the Hygeia Hotel with Mr. Harbeck, and during the forenoon we took up our march towards Newport News, where we encamped for the night. We halted for dinner at Hampton, which had been burnt the summer previously by General Magruder. Hampton had been a pretty village, built almost entirely of brick, and had a population of about 2,500 inhabitants before the conflagration. It was frequented as a summer resort before the war, by wealthy Southerners, and was a place of much aristocratic fame.

Before leaving Old Point I paid a visit to Fort Monroe, where I saw the then celebrated "Union" and "Floyd" guns. These were the two heaviest guns we had ever cast, and were attracting much attention in ordnance circles just then. The Fort impressed me with its ponderous magnificence, enclosing as it did and does between thirty and forty acres of ground, and mounting the heaviest ordnance we were capable of producing.

Colonel Bidwell was left at Washington sick when we sailed and to Lieutenant Colonel Alberger devolved the command of the regiment. Dr. Hall was also left behind to look after the sick and the property of the brigade, to report in person as soon

as that duty was performed. This left me in medical charge of the regiment, and the first surgery I had was the extraction of a ball from the wrist of one of the men on March 25, fired by some soldier in a neighboring regiment.

The officers were now without tents, excepting the D'Abri or shelter tent; but I used a hospital tent for my quarters, which the Major and Quartermaster occupied with me. At Fort Monroe I had a glimpse of the "Monitor," which had then so lately fought the most celebrated naval battle of the age within sight of our present camp, where the spars of the "Cumberland" were yet standing obliquely out of the water, a monument to the death of wooden vessels of war.

March 27th. Smith's Division made a five mile reconnoissance in the direction of Yorktown, driving some cavalry videttes away in the vicinity of Young's Mills. We remained out all night, bivouacking on lines lately occupied by the enemy, and returned to Newport News next morning, camping on the banks of the James about a mile above the latter point. Our camp was named "W. F. Smith," in honor of our Division Commander, who was familiarly known as "Baldy," a soubriquet he acquired at West Point when a cadet. During the few days we were here we frequently obtained fresh oysters from the Bay, and by March 30th, I noticed peach trees in blossom. I picked up a porcupine-fish skeleton on the beach at Newport News on the 31st that I sent home and still have in my possession. (Now in the Buffalo Historical Society Building.)

We now began to see the desolation of war—all houses were in ruins—and scarcely a living thing, "native and to the manner born," remains. The inhabitants, excepting the slaves, fled with retiring foe, leaving not even a stray chicken for the dreadful "Yankees." Newport News is not a town, as might be supposed, but simply a military post where 5,000 men are quartered in barracks, under the command of General Mansfield. On March 31st the rebel gunboat "Teaser" steamed down the James, and commenced throwing shells at our camp; but, after discharging three shots, she turned around and went back to Richmond, having done no damage.

April 1st. From this time I shall write generally in the present tense, as it is the most convenient. Today we made another reconnoissance in the same direction as before. We deployed a battery and fired a few shots at some cavalry, returning to camp about three o'clock P. M., without accident or casualty. The field and staff being still without tents, I borrowed a hospital tent of Dr. Mulford, surgeon of the 33d, and we are all occupying it as one family. Colonel Alberger is not well but keeps about camp, though Major Johnson is in command. The comforts of

Camp Griffin are often referred to these days, in contrast to the beggary of our present life.

Friday, April 4th. At six o'clock A. M. the army took up its advance upon Yorktown, our division leading on this line. We marched ten miles the first day, reaching and bivouacking in the vicinity of Young's Mills. Here we find barracks for three regiments, which were so lately deserted by the enemy that fires are still smouldering in the chimneys. We started again this morning, April 5th, at daylight, our brigade leading the march of the 4th corps. We found the enemy before noon, who resisted our advance in the rain, and we spent the P. M. in skirmishing, losing, in the 49th, one killed and one wounded. By four o'clock we had reached the position that the enemy sustained along the Warwick River, the strength of which proved sufficient to bring us to a halt. We established our pickets within three or four hundred yards of the enemy's works, and lay on our arms during the night. We were in a piece of woods in which it was difficult to manœuvre artillery, where we lay during Sunday and Monday, the 6th and 7th. Shell from the enemy's batteries frequently fell amongst us, and on Sunday the 49th had five men wounded. I picked up a spent cannister shot, that only expended its momentum at my feet. It was now evidently determined to siege the enemy's position as, on Monday evening, we were withdrawn to a safer and more comfortable position, after having been about sixty hours under fire. This withdrawal was accomplished with difficulty, the utmost secrecy being maintained, lest the enemy should become aware of our purpose. I remember an incident that will illustrate the caution observed: in falling back two of my hospital attendants were carrying some camp kettles on a pole, when the rattling of the kettles attracted the attention of General Davidson, who was sitting on his horse all alone in the woods where we were passing. He flew into a great rage, scolding me soundly for permitting the men to make such a noise. It was nearly dark and raining at the time, and I reached our appointed place in anything but good humor.

(Continued.)

SOCIETY PROCEEDINGS

Medical Society of the County of Erie

REPORTED BY FRANKLIN C. GRAM, M.D., Secretary

THE regular meeting of the Medical Society of the County of Erie was held in the rooms of the Buffalo Society of Natural Sciences on Monday evening, June 19, 1911, at 8.30 o'clock.

President McClure called the meeting to order and stated that, inasmuch as the minutes of the last meeting had been published in the Buffalo Medical Journal, their reading would be dispensed with unless otherwise desired. Hearing no objection, he so ordered.

The minutes of the Council meetings of June 5 and June 19 were then read and adopted.

Dr. Wall, chairman of the Committee on Membership, submitted names of applicants for membership, each of whom was separately ballotted for and elected, as follows:

Edward J. Ballou, Gardenville, N. Y.; George D. Stilson, 438 Potomac Avenue, Buffalo, N. Y.; Frank E. Lock, 226 Summit Avenue, Buffalo, N. Y.; Paul C. Campbell, 257 E. Delavan Avenue, Buffalo, N. Y.; Frank G. Walz, 905 Clinton Street, Buffalo, N. Y.; George A. Retel, 288 Broadway, Buffalo, N. Y.; E. G. Bodenbender, 660 Walden Avenue, Buffalo, N. Y.; Dr. Edward A. Sharpe, 162 Allen Street, Buffalo, N. Y., received by transfer from Medical Society of the County of Westchester.

Dr. Edward A. Sharpe, of Buffalo, presented a transfer from the Medical Society of the County of Westchester, stating that he was a member, in good standing, of said society. On motion, the transfer was accepted and Dr. Sharpe duly elected to membership in the Medical Society of the County of Erie.

Dr. George L. Brown, chairman of the Board of Censors, submitted report as follows:

"Mr. President and Members of the Erie County Medical Society: Your board of censors beg leave to submit the following report. At a meeting of the board of censors held May 6, Doctor Arthur G. Bennett, having resigned as chairman of the board, Dr. George L. Brown was elected to fill the vacancy. He received from the retiring chairman a bank check, amount \$46.22 which, on the following day, he deposited in the Marine National Bank in the name of George L. Brown, chairman of the Board of Censors.

May 16, received the following letter, forwarded to me by the attorney of this Society:—

CHAS. E. DOANE, ESQ.,

Dear Sir:—

Your letter of the 12th inst., relative to the appeal of John Treskow, charged with practicing medicine without a license, has been received. In reply, I beg to inform you that nothing has been done in this case, except a notice of appeal has been served by Cuddaback, Killeen and Karl, attorneys for the defendant. I am, therefore, unable at this time to inform you when this appeal will be argued.

Respectfully yours,

Clifford M. Laughlin.

Ass't District Attorney."

Receiving the following letter dated May 20—saying—"I beg to advise you, that I, as attorney for the Medical Society, obtained a warrant for Solomon Mesiroff, Proprietor of the Porter Medical Co., 333 Main Street. The warrant will be served as soon as Mesiroff returns to Buffalo."

That you may make a report of what has been done during the present year, I wish to advise you that one Consatino was convicted, on the 20th of January, 1911, of illegally practicing medicine. He was fined \$25.00, and placed on probation for six months. I shall prepare a request for the payment of this fine to this Society.

Respectfully yours,

C. E. Doane.

A request has been prepared and presented."

We find the following names of physicians, who have registered at the County Clerk's Office since January 1, 1911.

We do not know to what date our predecessor made his last report.

Salvatore Bronchato, registered January 16. Born December 20, 1869, at Ventimiglin, Italy, located at 129 Court Street; A. S. Culkowski, registered March 11, born December 13, 1887, at Buffalo, New York, located at 94 Swinburne Street; John David Davis, registered January 26, born June 4, 1861, at Cassadaga, New York, located at Springville, N. Y.; Francis Hoehn, registered March 16, born at Niagara Falls, New York, January 13, 1888, located at 211 Amherst Street; John B. Hogan, registered March 17, born at Niagara Falls, New York, January 13, 1888, location not stated; George F. Harris, registered April 19, born February 6, 1874, at Binghamton, New York, located at State Hospital; Ralph R. Hughes, registered April 24, born at Amoki, Minnesota, April 12, 1886, located at 707 Crescent Avenue; Stephen P. Jewett, registered March 24, born September 1, 1883, at Waterford, Maine, located at 130 North Ashland Avenue; Julius J. Klein, registered April 18, born December 3, 1870, at Sandusky, Ohio, located at 343 Normal Avenue; Alden D. Loomis, registered May 20, birth date and place not given, located at 6 East Seneca Street; Frank G. Lemon, registered May 22, born July 11, 1887, at New York City, N. Y., located at 400 Forest Avenue; Erwin H. Mudge, registered March 10, born December 14, 1886, at Olean, New York, located at 822 Elmwood Avenue; Isaac D. F. Nichols, registered December 27, 1910, born April 14, 1845, at New York City, N. Y., located at 6 East Seneca Street; Oreon H. Rhodes, registered March 15, born January 31, 1865, located at 3 Brisbane Building. He is advertising in the Press of this City, and New York City and Pennsylvania exclusively, to cure rupture and hemorrhoids; Frederick P.

Schenkelberger, registered April 24, born February 3, 1887, at Hiram, Ohio, located at Gowanda, N. Y.; Harry Sickerman, register May 16, born October 30, 1885, at Austria, located at 316 North Division Street; Isaac Weinstein, registered March 13, born December 25, 1867, at Koono, Russia, located in Buffalo, N. Y.

May 7th swore out a warrant for the arrest of Fannie Ciresa for practicing medicine illegally. She was located on the Terrace. She was advertising in the Italian papers as a Mechano-Therapist. The warrant has not been served as Miss Ciresa evidently became acquainted with the fact and has left the city.

June 8, 1911, swore out a warrant for the arrest of Lucius Auld, located at 79 Niagara Street, for practicing medicine without being registered in the Board of Health office. He is a successor to Dr. Walker, the advertiser. June 9, Doctor Lucius Auld plead guilty and paid the court \$10.00.

June 9, swore out a warrant for the arrest of Abraham Simon residing at 232 Mortimer Street, for vaccinating children without having a license. June 16, he plead guilty and paid the court a fine of \$50.00.

June 12, 1911, Solomon Meseroff, residence Chicago, Ill., was arrested for practicing medicine illegally, being the owner of the Porter Medical Co., removed recently from the corner of Main and North Division Streets to the corner of Main and South Division Streets. This case was called in Judge Hartzell's Court and adjourned to June 14, 2.30 p. m. On that date the case was partly tried and then adjourned to June 29. Mr. Meseroff is out under bail of \$500.00.

Signed by
GEORGE L. BROWN, Chairman
EDWARD CLARK,
A. G. BENNETT,
FRANCIS C. FRONCZAK,
LAWRENCE HENDEE, Secretary.
Board of Censors.

The report was accepted and approved and the thanks of the Society offered to the Board of Censors, especially its chairman.

Dr. Mulford, chairman of the Committee on Necrology, read memorials on the deaths of Drs. Frank B. Seitz, William Warren Potter, George Abbott and Carlton C. Frederick.

The memorials were adopted and ordered filed.

Dr. Edward E. Haley, chairman of the Committee on Contract Work, presented a very exhaustive report of his committee.

Dr. Wall moved that the report be approved and the resolutions contained therein adopted.

Dr. Crego moved, as an amendment, that contracts be not renewed after January 1, 1912.

Dr. Haley explained that contracts expire at various seasons and not all at the beginning of the year.

Dr. Crego withdrew his amendment with the understanding that this matter would be further considered, the amendment, proposed by Dr. Haley in his report, to lie on the table, under the rules.

Dr. Brown moved that Dr. Haley's report be published in the Buffalo Medical Journal and the New York State Journal. Motion was carried.

On motion of Dr. Wall, the committee will be continued, and it was requested that further report be made at the October meeting.

Dr. Wall then moved to take from the table his amendments to the by-laws, which had been tabled at the December meeting.

On motion of Dr. Wall, amendments were adopted as follows:

Amend Chapter 11, Sec. 1—The Medical Society of the County of Erie, being an integral part of the Medical Society of the State of New York, and the District Branch, membership may be obtained, etc.

Amend Chapter 11, Sec. 5—Candidates duly elected shall qualify as members by signing a statement that they will be governed by the by-laws of this Society.

Amend Chapter 5, Sec. 2—Insert between the word Society and appropriated, the words, "as authorized by these by-laws and as" and substitute for words "Estimates of the amounts needed,"—the words "a report and recommendation of action necessary."

On motion of Dr. Grosvenor, who opposed it, the following was referred to Council for reconsideration:

Amend Chapter 8, Sec. 4—Add after co-operate with, the words, and take no action on State Legislation or appointments until approved by."

Dr. Wall moved to substitute "President" for "Council" in Sec. 2 of Chap. VIII.

Dr. Grosvenor objected to the entire section and asked whether it was intended to eliminate the present section. He then moved to insert, after the word "delegate," the words "to the house of delegates," and the section was adopted as follows:

Chapter 8, Sec. 2—In case a delegate to the house of delegates cannot attend any meeting, the president shall appoint an alternate, and if any representative fails to appear, the other delegates present shall choose a member to act for him."

The following were then adopted:

Amend Chap. XI, Sec. 1—Insert "or" before "as arranged."

Amend Chap. XI, Sec. 5—to read, The order of business when not arranged by the council and printed in the notice of the meeting, shall be, and the like.

Amend Chap. XV, Sec. 1—Insert between words "been" and "sent" "approved by the council of the State Society and advice of the proposed change."

Dr. Grosvenor moved to substitute the word "at" for the word "for" in Sec. 2 of Chap. XV, making the section read as follows:

Chap. XV, Sec. 2—Any by-law except Chapter XV, Sects. 1 and 2, may be suspended at any meeting, and the like.

Section was then adopted.

Dr. Lytle stated that at the annual meeting he had been directed to prepare an amendment to the by-laws, governing the sinking fund, and he offered the following:

Amendments to by-laws, creating and defining a Sinking Fund, which were ordered prepared at the annual meeting December 19, 1910.

Amend Chapter XII so that caption shall read "Dues and Finances" instead of "Dues."

Amend by adding to Chapter XII two sections to be known as sections 4 and 5 which shall read as follows:

Sec. 4—After paying all outstanding floating indebtedness, all money derived from dues and in excess of one hundred dollars (\$100.00), that remains in the treasury at the close of each year (December 31), as well as such other money as this society may from time to time direct, shall be deposited in savings institutions designated by the Council, to the credit of a fund to be known as the Permanent Fund of the Medical Society of the County of Erie.

Sec. 5—No money shall be withdrawn from the Permanent Fund of the Medical Society of the County of Erie except by a two-thirds vote of the members present at a regular meeting, and provided that notice of intent to move for such withdrawal shall have been approved by the Council and a copy thereof sent to each member with the notice for the meeting at which such withdrawal will be considered.

Under the rules, this amendment will lie on the table.

Dr. Lytle made a report of the expenditures for the McCormick meeting which amounted to \$30.34 as the Society's share, but since that time, \$5.00 have been returned to the Society. Report was approved.

The secretary read a communication from the Medical Society of the County of Dutchess, as follows:

DR. FRANKLIN C. GRAM.

Secretary of the Medical Society of the County of Erie.

Dear Doctor:

At the regular meeting of the Medical Society of the County of Dutchess, held April 12, 1911, the following resolutions were adopted:

WHEREAS, We consider it impracticable and impossible for the average sized County Medical Society to secure the enforcement of the laws regulating the practice of medicine;

Resolved, That our delegates to the State Society be directed to bring this matter to the attention of the House of Delegates, with the intent that the enforcement of such laws be assumed by the State Society;

Resolved, That the Secretary send copies of these resolutions to each of the County Medical Societies in this State.

Trusting that you will bring this matter before your Society, I am

Very truly,
FREDERICK J. MANN,

June 5, 1911.

Secretary.

These resolutions were opposed by everyone present, for the reason that the Board of Censors is better able to look after such work than the State Society; Violators of the law being known in the County where the violations occur, the work can be done cheaper and more thoroughly than if entrusted to the State Society which would necessarily be under a great expense in trying to enforce the law. On motion our Delegates to the State Society were directed to oppose this proposition.

A letter was received from the Health Commissioner of Buffalo and read as follows:

June 19, 1911.

DR. DANIEL V. MCCLURE,

President of the Medical Society of the County of Erie,
Buffalo, N. Y.

Dear Dr. McClure:

At the meeting of the Board of Aldermen held today, a resolution was introduced looking to the rescinding of the ordinances providing for vaccination of teachers and pupils in the public schools of our city, and the like, the apparent reason for this action being the death, from general septicemia following vaccination, of a boy who had been vaccinated. The department tried to offset this matter, and I personally appealed to the editors of our daily papers to not publish anything about it, so as not to unnecessarily alarm the public.

They insisted upon the publication, however, and I, therefore, explained regarding the infection in order, if possible, to belittle the rumors and statements that vaccination was the cause of death.

A public hearing on the proposed rescinding of the ordinances has been set for Thursday night of this week, and I feel it quite necessary that a large committee be appointed to represent the Society in this matter and take such part in the hearing as may be deemed expedient and proper.

Respectfully yours,
FRANCIS E. FRONCZAK,
Health Commissioner.

Dr. McKee moved that the President appoint a strong committee in compliance with Health Commissioner Fronczak's request. Motion was adopted.

Dr. McKee moved that a committee be appointed to confer with the department of health, with a view of selecting a more appropriate time, for the vaccination of school children, than the end of the school year. Motion was adopted, and the President appointed Dr. McKee as chairman of such committee.

Assistant Health Commissioner Schaefer explained that the time for vaccination had been set at that period at the request of the School Principals of Buffalo.

Treasurer Lytle stated that the by-laws require payment of dues before April 1st of each year, and that the treasurer, under the by-laws, was directed to present the names of all those who are in arrears, at the next meeting of the Society.

This being the next meeting after that date, he felt compelled to make a report, which he did.

Dr. Joseph C. O'Gorman, a member of the Entertainment Committee, announced that this year's outing would be held at Island Park, Grand Island, July 25, boats to leave the foot of Ferry Street every hour; dinner from 5 to 6 o'clock; tickets, including boat ride, dinner and cigars, \$1.50. He requested everyone to supply himself with tickets and to support the outing with his presence.

This ended the business session and Dr. W. W. Quinton read a brief but interesting paper on the Treatment of Syphilis.

Dr. Roland O. Meisenbach then presented "An apparatus for the measurement of spinal curvature with method of recording cases."

After a brief discussion of the subjects presented, the meeting adjourned and a collation followed.

FRANKLIN C. GRAM,
Secretary.

At the regular meeting of the Medical Society of the County of Erie, memorials of Drs. Frank B. Seitz, William Warren Potter, George Abbott and Carlton C. Frederick were presented by the Committee on Necrology, through its chairman, Dr. Henry J. Mulford. These are given in brief, as follows:

FRANK BURGHARDT SEITZ, born at Rochester, N. Y., June 2, 1862. His preliminary education was obtained in the public schools of Rochester; his medical education at the Hahneemann Hospital at St. Louis, from which he graduated in 1891. For five years he was engaged in general practice at Rochester, during which period he was connected with the Rochester Homeopathic Hospital. In 1897 he went abroad for special study and on his return to America he opened an office at 33 North Pearl Street, Buffalo, for special practice in diseases of the eye, ear, nose and throat. Later he removed to 21 North Street, where he lived up to the time of his death.

Dr. Seitz was a member and a vice president of the Western New York and State Homeopathic Societies; a member of the Clinical Club of Buffalo; of the Buffalo Academy of Medicine, and Medical Society of the County of Erie. He also was a member of Holy Trinity Church, and of Washington Lodge F. and A. M.

Dr. Seitz was the author of various professional papers, which he had read before the medical societies to which he belonged; and of a book, "Through Sixteen European Cities," which he wrote after his trip abroad.

In January, 1910, Dr. Seitz contracted pneumonia, which left him in poor general condition and he never fully regained his health. He died June 14, 1910, at the age of 48, leaving a wife and five children.

ANY man who has lived fifty-two years at the service of his profession deserves the kindest thought of that profession, the highest honors in its gift. Such a man was WILLIAM WARREN POTTER. His medical life covered a period longer than the entire life of the average man; and, during that period, his labor was for his profession. His aim was its advancement, not the advancement of himself through it. His life illustrates this. He was ever ready to lend a helping hand to the younger members of his profession (there are many in Buffalo who can testify to this); and he died without riches. Every man has his faults, but in William Warren Potter there is no fault broad enough to blot the record. Truly, we may say that he was a gentleman, a gentleman at the service of his profession.

William Warren Potter was born at Strykersville, N. Y., December 31, 1838, the son of Dr. Lindorf and Mary Green

(Blanchard) Potter. He received his academic education at Arcade Seminary, N. Y., and at Genesee Seminary and College, Lima, N. Y. His medical education was obtained at Buffalo University Medical College, from which he graduated in 1859.

At the beginning of the civil war, two years later, Dr. Potter offered his services to the government and served three years with the Army of the Potomac. For "faithful and meritorious service" he was brevetted Lieutenant Colonel of United States Volunteers by the President of the United States, and Lieutenant Colonel of New York Volunteers by the Governor of the state of New York.

Returning to civil life Dr. Potter soon located at Buffalo, limiting his practice to diseases of women. In July, 1888, he became editor of the *BUFFALO MEDICAL JOURNAL* and shortly thereafter owner as well. He was a member of the several local, state and national societies, examiner in obstetrics and gynecology of the New York state medical examining board and president since 1897. He was a companion of the Military Order of the Loyal Legion of the U. S.; and a member of Bidwell-Wilkinson Post, G. A. R.

Dr. Potter died at Buffalo on March 14, 1911, after a month's severe illness.

The funeral services were held at 238 Delaware Avenue on March 16, the Reverend Cameron J. Davis, rector of Trinity Church officiating.

Dr. Potter's only son, Dr. Frank Hamilton Potter, died in 1891.

GEORGE ABBOTT was born at Palmyra, Wayne County, N. Y., November 2, 1826, was a descendant of George Abbott of Rowley, Mass., who came there from England in 1642. His father, the Reverend Orrin Abbott, was a minister, a soldier in the war of 1812, and a Chaplain of the 98th regiment N. G. S. N. Y. 1864.

Dr. Abbott attended the Akron High School and the Geneva Medical College, completing his medical course at the Buffalo Medical School, in February 1852. During his resident service at the Buffalo Hospital of the Sisters of Charity, he contracted Asiatic cholera near the end of the epidemic.

April 1, 1853, Dr. Abbott opened an office at Hamburg, N. Y. In 1854 he was appointed surgeon of the 67th Regiment N. G. S. N. Y. In 1856 he was elected Town Superintendent of schools, and helped to organise the Hamburg Union School and Academy. In 1872 he was elected School Commissioner, serving two terms. From 1857 until 1860 diphtheria was epidemic in Western New York, and he took a leading position in treat-

ing the disease, and with marked success. A paper which he afterward wrote on this subject was copied by the London Medical Journals.

In 1863 Dr. Abbott was mustered into the service of the United States in response to a call for militia to assist in repelling General Lee's attempted Northern raid, and served forty-three days. He was then appointed by the Governor of New York State to raise a regiment of militia for the Third assembly District of Erie County. Within sixty days he had raised seven companies of thirty-two men each, which were organized as the 98th Regiment N. G. S. N. Y., and he was made its Colonel. On August 10, 1864, the regiment was mustered into the service of the United States, doing guard duty at Elmira, over 15,000 prisoners of war during more than four months.

Dr. Abbott was a member of the old Erie County Medical Society, having acted on its board of censors, as its vice-president in 1864-'65, and its president in 1866. He was a member of the G. A. R.; past member of Zion Lodge, F. and A. M. of Orchard Park, N. Y., and, for many years, of Fraternal Lodge No. 625, F. and A. M. of Hamburg. At one time he was treasurer of the New York State Grange. In politics he had been an Anti-Slavery Whig, later becoming a Republican.

Dr. Abbott was married to Julia Clark Church, of Fort Ann, Washington County, at Hamburg, April 19, 1857. Mrs. Abbott, and two of their five children, George Burwell Abbott of Hamburg, and Mrs. Peter Thompson of Spencerport, N. Y., survive him.

Dr. Abbott had been in failing health for some years previous to his death, which occurred on March 26, 1911. The funeral was on March 30th, from the Methodist Church, and burial was in the Hamburg Cemetery.

CARLTON CASSIUS FREDERICK was born at Hamburg, N. Y., May 1, 1855. His parents were Peter C. Frederick and Mary Jane Clough, his wife. When he was fourteen the family removed to Buffalo where he attended Grammar School No. 14, and the Central High School. He received the degree B. S. from the University of Michigan in 1877. During 1877-'78 he taught school at North Evans, N. Y., and during 1878-'79 he taught in Professor Briggs' Classical School. In 1879 he entered the Buffalo University Medical School, graduating from there in 1881.

Dr. Frederick was interne at the Buffalo General Hospital for the year following his graduation. Then opening an office at 64 Richmond Avenue, he devoted himself to general practice. From the first he was successful, developing one of the largest general and obstetrical practices in Buffalo. As his experience

grew he gave his attention more and more to abdominal and pelvic surgery, until, at the time of his death, he had become an authority in that branch of his profession. Both his consultation and his operative work were very extensive, not only in Buffalo itself, but also throughout the surrounding territory.

Dr. Frederick was associated with Dr. Thomas Lothrop when the latter started a Maternity Hospital at Seventh and Maryland Streets, and, later, in the founding of the Women's Hospital. The first abdominal operation performed in the hospital was done by Dr. Frederick on November 19, 1891, assisted by Dr. W. S. Tremaine. The case was one of double pyosalpinx.

In 1891 Dr. Frederick went to Europe and studied under Martin and Olshausen at Berlin; Sanger at Leipsic; Leopold at Dresden; and Lawson Tait in England.

In 1885 Dr. Frederick was obstetrician to St. Mary's Asylum in Edward Street; in 1908 President of the Medical Society of Central New York. He was a Member of the Alumni Association of the University of Michigan; of the Medical Society of the County of Erie; the Medical Society of the State of New York; the American Medical Association; the Buffalo Medical Club; the Buffalo Academy of Medicine, and the Alumni Association of the Buffalo General Hospital. He also was a Member of the American Gynecological Society and the American Association of Obstetricians and Gynecologists. He was Adjunct Professor of Obstetrics in the Medical Department of Niagara University, and, later, Clinical Professor of Gynecology in the University of Buffalo.

Dr. Frederick was President of the Buffalo Academy of Medicine at the time of his death.

In 1885 Dr. Frederick married Elizabeth B. Smith of Syracuse, N. Y., who survives him, together with one son, Thomas Lothrop Frederick, and one daughter, Ruth.

Dr. Frederick died on April 30, 1911, aged 56 years, after a brief illness, death being due to endocarditis.

DR. JOHN SANFORD HALBERT, of 2485 Main St., died at Rochester, Minn., July 18, 1911. Dr. Halbert was a graduate of the University of Buffalo, 1872. He held the position of Obstetrician to the Homoeopathic Hospital.

TOPICS OF PUBLIC INTEREST

THE British Medical Committee that has been studying spiritual healings for ten years, has reported that it finds no essential difference between this mode of treatment and mental suggestion in general.

THE North American Children's Sanitarium for the Treatment of Surgical Tuberculosis, has recently been opened at Atlantic City. Drs. H. Augustus Wilson, John B. Carnett and Wm. L. Rodman of Philadelphia are the executive committee; Dr. John C. Tull, the resident surgeon; the consulting staff embracing a long list of physicians and surgeons, mainly of Philadelphia and Atlantic City. This charity is to continue the good work of the N. A. Sanitarium for Convalescent Children which, last year, cared for over 1000 patients. The only restrictions are that patients must be white and under 12 years of age, admission being in order of date of application, from a waiting list. MAYOR FUHRMANN has signed the bill authorising the city to establish a hospital and industrial colony for inebriates. This bill has been supported by the Charity Organisation Society and aims to make possible the scientific and humane treatment of drunkards.

The Health Department, the District Nursing Association, the Society for the Relief and Control of Tuberculosis and the Charity Organisation Society, have appointed a joint committee to carry on the crusade against the "White Plague" in Buffalo. Weekly conferences will be held.

Post-Operative Hemorrhage

WHIPPLE and Hurwitz, *Jour. Exp. Med.*, Vol. 13, No. 1, in investigating the action of chloroform on the liver, noted that several dogs died of uncontrollable hemorrhage. This might be due to any of three deficits—calcium, thrombin or fibrinogen. Calcium was found by analysis not to be deficient. Thrombin was shown to be present in normal amount by the fact that the blood actually coagulated with normal rapidity—in 4—7 minutes after withdrawal—but the clot was lacking in tenacity and small in volume. Hence, the fault was obviously due to lack of fibrinogen.

Fibrinogen is either formed within the liver or, at any rate is due to hepatic activity and its failure was shown to be due to and to correspond in degree to hepatic necrosis. It was usually necessary to administer chloroform for two hours to produce marked hepatic necrosis and, even when the necrosis, which begins in the center of the lobule, involved half or three-fifths of

the lobule, repair usually begins on the second and third day and is practically complete in a week.

Thus, we may conclude that while this study is extremely interesting, post-operative hemorrhage is not to be expected after chloroform anesthesia of any reasonable duration in patients free from hepatic disease.

Leslie Roberts (*Brit. Jour. Derm.* June, 1911), reports the death of a woman aged 21, from Acute Lupus Erythematosus (Aigu D'Emblée.)

The origin of the affection was not determined but on the father's side there was a marked history of tuberculosis (seven of a family of eight having died from pulmonary and laryngeal phthisis) and the post mortem examination in this case showed the mesenteric glands to be the seat of an old caseous tuberculosis.

This woman, who had enjoyed good health, suddenly complained of extreme lassitude, sore throat and difficulty in swallowing which induced her physician to make a diagnosis of quinsy. Five months later she complained of severe pains in her arms and legs. One month later an eruption appeared on the cheeks which increased week by week until the face was swollen and suffused with a full, deep red color symmetrically distributed over the nose, cheeks, eyelids and ears. On the cheeks were dark greenish-yellow crusts beneath which the skin was ulcerated; purpuric petechiae were scattered over the chest, abdomen and upper and lower limbs; erythematous patches appeared on the palmar surfaces of the fingers and the left great toe. The symptoms steadily increased in severity, a septic temperature set in and the patient died eight months from the first appearance of the disease.

Attention is called to the sex of the patient, the mysterious origin, vague early symptoms, rheumatoid muscular pains and painful spots in various parts, increasing weakness and loss of appetite. The early eruption may simulate erysipelas; later it may exhibit an eczematous appearance. Purpura and hemorrhage are fairly constant. Prognosis is bad; of eleven cases so far reported, ten have died.

Roberts concludes that Lupus Erythematosus is probably the excretion of a toxin by limited areas of skin followed by a cytolytic and erythematous reaction and its frequent association with adenitis seems to warrant the hypothesis that the disease is caused by a cytolytic poison which originates in the leukocytes of the lymph glands.

W. W. Q.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

WILLIAM WARREN POTTER, M. D.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 236 DELAWARE AVENUE, BUFFALO, N. Y.

VOL. LXVII.

AUGUST, 1911.

No. 1

The Policy of Expansion

Beginning with the sixty-seventh year, the BUFFALO MEDICAL JOURNAL will adopt a policy of expansion. We wish to increase the thickness of the magazine, while condensing its contents and increasing their practical value, to carry more advertisements, to be less local. This policy requires some time and much labor, both on the part of the staff of the Journal, and of the physicians of Buffalo and Western New York.

We want the medical profession to feel that they own the Journal—No, there is no cause for alarm, there will be no importuning for purchase of stock. Nor does this kind of ownership imply the feasibility of insistence on the carrying out of individual opinions, much less of combating individual antipathies. But we want every physician in Western New York to contribute to making the highest ideal a realisation, to use the Journal as a medium of communicating to the profession, his best thoughts and knowledge of his personal movements and interests.

The "circulus vitiosus" is well understood by medical men. It may affect a periodical as well as a patient. It would be better if we thought more of the "circulus favorabilis." So far as a periodical is concerned, this means more subscribers, more advertisers, more funds, more pages, better quality, and so on, over and over. In looking over the logical field of the Journal, we note that, outside of New York City, there is no medical journal published in the state, except the *Albany Medical Annals*, which is the official organ of the Albany Medical College. While the BUFFALO MEDICAL JOURNAL reaches adjoining states and Ontario, and has a surprisingly large circulation of wide radius, even going across the Atlantic, both as an exchange and to subscribers, we feel that it should represent especially, the interests of the four western District Branches of the Medical Society of the State of New York or, rather of their component societies, independent organisations and individual members. This region

has a population of about 2,500,000, a professional strength of about 4,000, of which about half is included in regular medical organisations, state, district and county. We feel that, while maintaining the American precedents of individual freedom of thought and action and of local self-government, the medical profession should concentrate its forces by thorough organisation and, in both of these balanced and contrasted but not opposed policies, the BUFFALO MEDICAL JOURNAL expects to be of greater and greater service.

A story is told of a retired army officer who met a brother officer, less fortunate, selling pies on a street corner. He began a voluble expression of sympathy but was cut short with "Hang your sympathy, buy a pie." The BUFFALO MEDICAL JOURNAL is not in need of sympathy but, nevertheless, to carry out the aim mentioned, it needs an equally practical spirit of co-operation. This means, prompt payment of subscriptions, personal effort to secure new subscribers, on the part of those already on our list, remittance of draft, post office order or stamps on the part of those who read this and who are not already subscribers. It should not be forgotten that an advertisement implies, not merely a desire to sell wares, but a very practical assistance in the educational work of periodicals, and, in particular, a disposition to cordial co-operation with the profession.

There is one detail which we have only recently realised and which, we believe, is not commonly appreciated. Owing to family relationship, association in institutions and partnership, at least in sharing offices, a circulation which covers the entire medical profession of any average city has a numeric—and financial—strength of not much more than half of the medical population. In the last three days, spontaneously and in response to telephonic requests, thirty-five additions have been made to our list. This brings us nearly to the possible limit for Buffalo and we ask the co-operation of our readers in bringing in the comparatively few remaining.

It would involve a very considerable expense to solicit, even by sample copy and circular postal card, subscriptions from the other cities and smaller communities of Western New York, following a directory list. We prefer to invest this sum more directly in enlarging the JOURNAL. We are, therefore, mailing to each post office in the territory indicated, one or a few copies of this issue, according to population, and ask, as a special favor, that the physician addressed will donate a little time at the telephone, or personally, in calling the attention of his confreres to this Journal. No formalities will be necessary in the way of order blank, and the like. Simply send draft, order, check or a sheet of postage stamps to the amount of \$2.00.

Compulsory Vaccination

The public hearings in the Common Council Chamber on Vaccination have led to the organisation of an anti-vaccination Society. It would seem that the terrible warning of history ought to suffice to convince any thinking person of the value of vaccination. Before the advent of vaccination, smallpox prevailed as commonly as scarlet fever and, like any prevalent semelincident disease to which natural immunity is an exceptional occurrence, mainly as a disease of childhood. Its mortality was great and the disfigurement among survivors was so common that contemporaries spoke of the "waffle-face" as conspicuous by its absence.

We forget these lessons in these days when a physician of long years of extensive practice may admit without shame that he has never seen a case and when the ignorant and negligent are protected by the precautions so long and so generally in force. There seems to be developing, a class of the community that forms opinions without personal knowledge and contrary to the experience of those competent to judge. Such persons must look into a gun to see if it is loaded and put their own finger on the invisible teeth of the buzz saw. This is an expensive way of gaining wisdom. It is claimed that to ascribe the marked diminution of smallpox to vaccination is merely an illustration of the "post hoc, propter hoc" fallacy. Unfortunately, "post hoc, propter hoc," has come to suggest a fallacy immediately whereas the general sequence of one event upon another, nine times out of ten, really signifies a genuine causal relation and not a fallacy.

The diminution of smallpox is ascribed to hygienic factors of a general nature, yet such factors have produced very slight alterations in the incidence of measles and scarlet fever, which are closely analogous clinically and, in all probability, pathogenically.

Aside from the humanitarian sentiment which makes each man and, especially each trained man, his brother's keeper, it would be a valuable experiment to allow the development of a non-immune class. We should then know just how much truth there is in the prevalent conception of anti-variolar immunisation, how far smallpox has been controlled by vaccination and how far by general sanitary measures, how far vaccination without quarantine, can be depended on. Obviously, until opportunities for contracting smallpox have gradually developed, the anti-vaccinationists will be able to say "I told you so."

The personnel of the anti-vaccinationists indicates a strong Christian Science influence and it must be conceded that, from

the standpoint of this cult, vaccination, like everything else of a material practical nature, is "error."

We are somewhat at a loss to account for the names of prominent homoeopathic physicians among the list of officers of the Anti-vaccination Society. Vaccination seems to illustrate most admirably the principle of "*similia similibus curantur*." The virus is now commonly regarded as an attenuated bearer of the variola microorganism and, indeed, certain strains of vaccine are directly traceable to human smallpox. The successive cultures, taking a minute particle of virus from one animal, inoculating another, taking a minute particle from the latter and so on, in a long series, corresponds with almost mathematic accuracy to the preparation of high potentials of an ordinary drug, vaccinia being a miniature variola corresponds to the essentially homoeopathic method of "proving" a therapeutic agent, and the dosage is comparatively minute. Smallpox comes well within the "itch-mite" theory of causation of disease, and for this theory, we believe that it is unfair to ridicule Hahnemann. On the contrary, he should receive credit for having early presented the essential conception of the germ theory of disease, in crude form it is true, but with no more crudity than was inevitable from the comparatively undeveloped state of biologic science in his time. Nor should homoeopaths oppose vaccination on esthetic grounds for, within a very few years, other forms of pus and excrementitious matter from human sources, have been listed by their drug houses.

We cannot but feel that the recent sentiment against vaccination is largely due to the general dissemination of scientific knowledge in so dilute a degree as to lead to arrogance. It requires a good deal of study to make a man humble and receptive of authority. Perhaps, too, Americans are beginning to realize that there is actually less personal liberty in the United States than in any other civilized country of the world between Russia and China and they are taking an unwise mode of protesting against official interference in the details of their private lives.

Popular Education

FIVE hundred and three students were graduated from the public high schools of Buffalo, last June. Twenty-five years ago, when the population was about half its present number, fifty was a fair sized class. It is probably a conservative statement that five times as many girls and boys—relatively to population—receive a high school training now, as thirty years ago.

Of any average community, about 1.8 per cent. consists of girls and boys of the age at the end of the high school course.

Counting the population of Buffalo as 425,000, there are 7,650 of this age. One in fifteen of them actually completes the academic course in the public schools. Probably, including parochial and private schools, at least one in ten is educated to this degree. About half of the rising generation has, for some years, had the benefit of what was, a generation ago, the first year of a high school course. The present full high school course covers approximately half of the college course of our grandfathers.

Buffalo is not exceptional in school attendance. Speaking broadly, the same degree of education is received in most cities, even in most villages and rural districts in most of our states, excepting some few, of relatively small population and having to deal with peculiar problems of race or sparse distribution of inhabitants.

Is this a proper topic for consideration by a medical journal? Yes, it indicates on the one hand that the raw material for recruiting the ranks of our profession is better prepared than ever before; on the other hand that the laity to whom they will minister, will insist more strongly on advanced professional standards and will co-operate more intelligently with the profession, both as individuals in matters of personal hygiene and as a people in accomplishing sanitary reforms.

The General Practitioner and the Optometrist.

MANY optometrists apply directly to physicians for the reference of refractive cases and, from the confidence with which they speak and the blanks which they have prepared, as well as from direct statements by both optometrists and physicians, we may conclude that such relations exist in considerable number.

Passing the natural hesitancy of the regularly graduated physician in special practice, to canvass the profession for reference of cases, it must be acknowledged that the proposition of the optometrist is fair and business like. It should be noted, however, that the request of the optometrist is very different from that of the manufacturing optician for prescriptions, which latter are fairly comparable to prescriptions for drugs or orders for instruments, prosthetic devices, and the like.

The optometrist bids for a branch of medical practice in active competition with the more modest, implied readiness to take similar cases, on the part of the doctor in medicine who has qualified as a specialist in diseases of the eye. The osteopath, as well as the extra-professional practitioner of various other kinds also competes with the regular physician, general practitioner or

specialist, but he does so independently and without asking favors of the medical profession.

We raise the question whether, on either economic or ethical grounds, a member of the medical profession should aid in competition against his own profession. The fact that an individual practitioner does not himself perform the particular professional service in question or that the competitive process does not directly affect the man asked to refer cases but only a limited and specialised part of the profession, should influence our decision in no way. The ethical specialist is a bona fide member of the whole profession, participating in all its general interests, performing on the average a disproportionate share of the duty of the profession to care for its own members, contributing like every other physician to the strength of medical organisation and more than most to the general fund of knowledge, of the profession. He competes to a less degree than the average and less directly, with the general practitioner. Should the general practitioner or a specialist of another kind aid in extra-professional competition against a brother physician?

From the very narrow and immediate standpoint, the reference of cases to an optometrist, a midwife, an osteopath or any other extra-professional practitioner in a narrow field, may serve the interests of the physician who does so. But it is difficult to see how this can be so, except by the payment of commissions, frankly or in a round-about way and, on such methods the medical profession has expressed itself clearly and emphatically.

Even from an equally selfish but farther sighted view, it is clear that the usurpation of medical practice by extra-professional competitors, affords a precedent for the seizing of one detail after another which now helps support and train the entire profession. Successful competition with any specialist will simply tend to drive him back into general practice so that the fact that the physician who abets the efforts of the outside man to get medical practice does not immediately reduce his own practice, has no bearing on the ultimate result.

There is one more fact to be considered, in the interests of the patient. The eye is something more than an optic apparatus and the correction of visual defects demands much more than the measurements of curved surfaces. The ordinary run of eye cases may, perhaps, be treated by the simple application of principles of refraction. So the ordinary run of fracture cases might be treated by an ignorant bone setter with a good eye and a delicate tactile and muscular sense. Stomachs can be washed by a trained nurse, or by the patient himself, midwives can deliver the normal parous woman, almost anyone of average intelligence

can be taught to pass the catheter, in fact, to perform any other detail of medical practice. But we must not forget the need of a guiding, broadly trained, medical intelligence that can not only perform the obvious mechanic detail but that can supervise the interests of the whole patient and that can judge correctly whether the case is merely one of mechanic detail or whether some serious general pathologic process underlies the particular manifestation.

Cholera Asiatica

THE American epidemics of cholera occurred in 1832, lasting till 1834, 1848, 1854—mute remains of which were turned out of the old Masten Park Cemetery a few years ago—, 1865-'6, and 1873, limited in the last year to New Orleans and the Mississippi Valley and neighboring states. The history of cholera in Europe goes back to the fathers of medicine and includes many devastating epidemics. For centuries, cholera was believed to follow the foot steps of the Wandering Jew, the legend undoubtedly being an attempt to explain the curious deviations in the route of cholera and the skipping of cities and localities which would have been involved by an air-borne epidemic. Religion has more to do with the spread of cholera than the invention of a legend. The cholera spirillum seems to have evolved as a specific pathogen in Asia, probably in India. The belief in the sacredness of the Ganges has led to a continued, almost continuous infection of its waters, by bathing, as well as by natural drainage from fomites. Visitors from a distance, drinking and bathing in its waters and carrying the precious liquid back to their home have maintained an endemicity of the disease independently of and even against natural currents. On the other hand, pilgrimages of the Mohametan portion of the Indian population have transferred the infection to the equally holy well at Mecca whence, both by religious and commercial intercourse, the disease has been still further radiated.

The Wandering Jew has often knocked at our door. In 1892, another American epidemic was greatly feared but vigorous quarantine measures prevented a lodgement. This summer, cholera may be said to have effected a foothold. At present writing, as late as our date of publication admits, nearly twenty cases have been treated, about half having died. Two resident cases have developed, one in New York, the other in Boston. While we are not apprehensive of anything approaching an epidemic, some degree of alarm is excusable and salutary. Cholera and typhoid are the two prominent hydrophoric—water-borne—infections, if indeed they are not the only ones of this essential

etiology with which European and American physicians have to deal. In temperate and cold climates, cholera epidemics have usually subsided quite promptly, without becoming endemic even in the sense of typhoid. Apparently, therefore, the cholera spirillum is a delicate organism, not capable of withstanding ordinary natural, extra-corporeal vicissitudes. But it is a disease of approximately 50 per cent. mortality, as compared with about 10 per cent. for typhoid and it is said not to be semelincident, i. e., one attack does not confer immunity. The authorities have been severely blamed for not having jugulated the disease at its first appearance. Censure should be withheld until a thorough investigation shall have been made. Meantime, vigorous quarantine and disinfecting measures are being carried out and we hope that no further development will occur.

Dr. Wiley

The attempt to oust Dr. Wiley has, apparently fallen flat. It is understood that he will be, technically, reprimanded for exceeding his authority in making necessary expenditures for carrying on the work of his department but the general sentiment seems to be that his powers should be increased, so that he can exercise similar discretion in the future, without question.

There are many interests in the country which have been seriously hampered in their exploitation of the public, by the Pure Food and Drugs Law, and by Dr. Wiley's aggressiveness in its execution. Political interests also are always on the alert to grasp an important office. The sentiment which has manifested itself so vigorously and so promptly, in Dr. Wiley's behalf, has been very largely independent of party politics; some of the interests under control of his department have merited praise by their warm support, the press representing an intelligent public, has with comparatively few exceptions, shown both that sanitary and hygienic regulations are now appreciated at their true value instead of being viewed with hostility, and—more important than anything else in its ultimate issue—that politics in the old sense is losing strength in the control of government and that efficiency in public office will elicit support.

Disadvantages (?) of Menthol

H. TRIBOULET, *La Clinique*, January 13, 1911, mentions irritation of various kinds, due to the use of menthol in coryza; acute conjunctivitis due to a proprietary powder; and a dermatitis of the face, resembling erysipelas, due to a hay fever snuff, containing menthol. He naively states that he has never himself

encountered nasal, pharyngeal and laryngeal irritation, having never used a solution stronger than 10 per cent.

It would seem that such disadvantages are due to a misapprehension of the action and, more particularly of the concentration of menthol to be used. Aside from a slight antiseptic action, and the sense of comfort which menthol affords in weak solutions, the value of this agent—or of oil of peppermint—is due to its stimulation of local blood supply which naturally enough, would bring about the disadvantages claimed if too strong solutions are used.

Long ago, we used a 10 per cent. solution of menthol in purpetrol for erysipelas and local sepsis and with very prompt results. We occasionally employ a 10 per cent., more often a 5 per cent. solution in purpetrol as an endo-gastric spray, the actual dosage by this method being very small. For ordinary use on mucous membranes, 2 per cent. should rarely be exceeded and 1 or even $\frac{1}{2}$ per cent. is usually more soothing. It ought to be obvious that menthol is not adapted to use on the conjunctiva, or in the urethra and we have even been very cautious as to employing it about the anus although a weak oily solution in the lower bowel or even applied by pledgets of cotton to the anus itself, may act favorably.

In this connection, we may call attention to the fact that peppermint is by no means an inefficient remedy nor one that can be used with impunity. We have seen syncope and transient deafness caused by the taking of a teaspoonful of the essential oil, but with recovery.

Knee Chest Position as a Sign of Pericarditis

M. EDGAR HERTZ, of the Necker Hospital, Paris, (*La Tribune Medicale*, May, 1911), cites four cases of pericarditis with marked effusion in which relief of the dyspnea was secured by the knee chest posture, by the spontaneous endeavors of the patient himself to find a comfortable position. He knows of no other condition in which the patient assumes this posture of his own accord. The action seems to be purely mechanic and not due to the exact pathologic lesion as the sign has been noted in rheumatic, tuberculous, post-scarlatinal and nephritic pericardial effusion.

We would add the caution that this sign is merely suggestive; also that when the knee chest posture is not spontaneously assumed by the patient it might be well to place him in it, if necessary with a pillow or strap support, both for diagnostic and therapeutic purposes.

PERSONAL

(The editors would be glad to receive items for this department from any physician, whether a subscriber or not. In the future, we shall rely largely upon notices of removal, change of office hours and personal notes of travel, and the like, furnished by the physician himself.)

DR. AND MRS. ALBERT E. PERSONS of West Tupper Street left in July for an extended Western trip, including Yellow Stone Park and Alaska.

DR. BENJAMIN H. GROVE of Pearl Street sailed on Thursday, July 13th, on the North American Lloyd steamer George Washington for Bremen. He will tour for a few weeks through Germany.

DR. JAMES L. GALLAGHER, Dr. C. J. Carr and Dr. W. H. Billings sailed from Montreal early in July for a tour through Europe, and will return the early part of September.

OUR readers will join us in extending sympathy to Dr. Harry A. Wood, whose wife has recently died.

DR. FRANCIS E. FRONCZAK has waived, for the remainder of his term of office, the increase of salary from \$4,000 to \$5,000, passed by the Common Council over the Mayor's veto, in June. We trust this action will be taken as a precedent by officials generally as to the propriety of refusing an increase of salary during an unexpired term of office.

DR. GEORGE B. STOCKER spent a week in Cleveland in July, as delegate to the supreme convention of the K. O. T. M.

DR. Ernst Fuchs, privy councilor of the University of Vienna, on his way to deliver a course of lectures at Leland Stanford University, was the guest of Dr. Lucien Howe.

DR. WILLIAM OSLER of Oxford, received a baronetcy in the distribution of coronation honors. This honor is not merely a personal tribute but a recognition of the value of medical science in general and, indirectly, of medical progress in Canada and the United States. Three years ago, we enjoyed Dr. Osler's hospital-

ity at his home in Oxford. Twenty-three years ago, we gained much from his teaching. Our greetings to Sir William.

DR. C. A. BENTZ will spend a year or more in foreign study, at Vienna, Paris, Berlin and Dresden.

DR. JOHN CHALMERS attended the convention of the K. O. T. M. in Cleveland in July.

DR. WM. T. GETMAN is taking a vacation at Boston.

DR. F. C. BUSCH is spending two months, investigating problems in comparative physiology and embryology at the U. S. Fisheries Station at East Orland, Me.

BUFFALO had a small representation at the latest A. M. A. meeting in Los Angeles—Drs. A. A. Jones, F. Parke Lewis, Wm. H. Thornton and Clara A. March.

DR. WM. P. CLOTHIER is spending a month at Chatauqua.

DR. JAMES A. McLEOD reported two cases of extra-uterine pregnancy at the recent annual meeting of the Ontario Medical Association.

DR. CHARLES VAN BERGEN is spending a month at Bretton Woods, N. H.

DR. DEWITT H. SHERMAN visited in the Adirondacks during July.

DR. WM. F. GALLIVAN, of the class of 1909, University of Buffalo, who has been house surgeon at Bellevue for the last two years, sailed in July for Germany to continue his studies.

DR. FRANK A. VALANTI will sail in August for Europe, expecting to study for a couple of months in London and then to pass the winter in Vienna, later attending clinics in some of the Italian cities.

SOCIETY MEETINGS

THE American Association of Obstetricians and Gynecologists will hold its twenty-fourth annual meeting at Louisville, Ky., September 26-28, 1911, under the presidency of Dr. Herman E. Hayd, of Buffalo. An interesting program is being prepared.

BOOKS AND AUTHORS

American Practice of Surgery. A complete System of the Science and Art of Surgery by representative surgeons of the United States and Canada. Edited by **Joseph D. Bryant, M.D.**, and **Albert H. Buck, M.D.**, New York. Complete in eight volumes. Vol. VIII. Regional Surgery, etc. Imperial octavo, pp. 1146. Profusely illustrated. New York. William Wood & Company. 1909. (Price, cloth, \$7.00.)

The present volume completes the largest surgical work in the world's literature, since the days of those prolific and industrious Chinese authors whose writings on medical and allied subjects often filled as many as forty and fifty bulky volumes, and it has become the world's recognised authority on surgical detail.

It is not only difficult but almost impossible adequately to review such a work within the limits at command for there are over one hundred separate contributions from the pens of the most eminent surgeons in this country and Canada, and in simple justice to the excellence of their contributions each should be given that separate consideration demanded by the eminence of the men and the value of their writings. Yet since the work as a whole may be now considered, the salient feature is the pronounced discrimination displayed by the editors in their arrangement of the various subjects and the limitations which they fixed in assigning the work of their collaborators. In no case throughout the entire series of volumes is one impressed with the feeling that here too much space has been given a relatively unimportant subject, and there too little to a surgical condition which should have been more extensively treated. Everywhere is that sense of balance, that indefinable editorial instinct which rounds out and makes for perfect literary architecture. This result were wholly impossible at the hands of a man, however brilliant a surgeon he might be, who had no literary taste; nor could the essential editorial mind, lacking surgical experience have achieved so perfect a goal. There must have been a combination such as controlled the destinies of this great work, an eminent and practical surgeon of authority and literary taste working harmoniously shoulder to shoulder with an editor of widest experience.

This, the last volume contains an article on intrathoracic surgery by the Ransahoffs of Cincinnati, in which they describe the methods of operating in the differential pressure chambers. The surgery of the abdominal organs follows with articles on the spleen by A. E. Garrow, of Montreal; kidneys and ureters by James Bell, of Montreal; pancreas, liver, gall-bladder and biliary passages, by G. D. Stewart, of New York; urinary bladder and prostate, by A. H. Ferguson, of Chicago; ovaries and Fallopian tubes, by R. B. Schenck, of Detroit; uterus and its ligaments, by J. B. Murphy and F. W. Lynch, of Chicago. There

are two articles, brief but of exceptional interest, on extrauterine pregnancy and cesarean section and its substitutes contributed by Lewis S. McMurtry, of Louisville. Other chapters concern the law and its relations to the practice of surgery, by Stephen and Sidney Smith, of New York, and Administrative surgical work.

Major Charles Lynch, of the medical department of the United States Army, and editor of *The Military Surgeon*, contributes an interesting article on military surgery which treats of the army organisation, field hospitals, convalescent camps, transportation of the wounded and which is illustrated with a number of photographs of the Japanese military hospitals. This is followed by a similar article by Surgeon General Stokes of the navy, dealing with the difficulties of caring for the wounded at sea during an engagement.

In the appendix, the relation of blood pressure to surgery, is handled by J. E. Sweet, of Philadelphia in an excellent manner.

The publishers are to be congratulated on their portion of the work. The illustrations are not surpassed in any printed book and the typographic excellence is unusual and wholly beyond any honest criticism.

Plaster of Paris and How to Use it. By **Martin W. Ware, M.D.**, Instructor of Surgery in the New York Post-Graduate Medical School. Second edition. New York: Surgery Publishing Co. (Cloth, \$1.25.)

There are few medical books published of such irresistible appeal to the general practitioner as this exceptional and valuable little work. The first edition was soon exhausted and the necessity for a second issue gave Dr. Ware opportunity to revise and practically rewrite a large portion of it. In its enlarged form its usefulness has been greatly enhanced. New drawings and marginal side notes in red have been added and there are now ninety illustrations which are of definite help in grasping the fundamental principles of the book. Under the general heading of Plaster of Paris bandages there are sections devoted to history, materials used in manufacture of bandages, storage, the bandages of commerce, the immediate preparation of bandages and the Calot plaster bandages. There are also chapters dealing with the application of the plaster bandage to individual fractures, fractures of the upper extremity, the lower extremity, molded plaster, splints and plaster in orthopedic surgery. These are presented in such a comprehensive manner and in such understandable language that the book, small though it be, is one of the really invaluable contributions to medical literature. The publishers have ably seconded Ware's efforts to give the profession a book of distinct merit.

Manual of the Diseases of Infants and Children, John Ruräh, M.D., Baltimore; third edition, 1911, W. B. Saunders Co., Philadelphia. Five hundred and thirty-four pages, 173 illustrations, \$2.50.

This is a small book, bound in flexible covers, containing in condensed form a vast amount of information concerning not only the diseases of infants and children but statistics of growth, dietetics, general hygiene, therapeutics, useful hints for securing the necessities of a complete nursery for the poor and even a list of pediatric medical journals. We would advise especially the careful perusal of the general discussion of the physiology of infancy, of the diseases of the new born and such other chapters as are readily recognised to be out of the beaten track.

Without wishing to appear captious, we would plead for an additional H in "rachitis," for a reduction of the meat ration for young school children below half a pound a day, for a reasonable use of nuts, candy, bananas and simple forms of cake like cookies, for a more cautious use of alcohol in the therapeutics of children, and for the insertion of metric dosage.

While, at first glance, the work impresses one as adapted especially for the undergraduate student and for ready reference by the busy practitioner, it is really very complete and thorough, its brevity being due to careful condensation and the omission of unessential discussions.

A. L. B.

Golden Rules of Pediatrics. Practical Rules for Diagnosis and Prognosis. Essentials for Feeding. Principles of Scientific Treatment. By **John Zahorsky, A.B., M.D.,** Clinical Professor of Pediatrics, Medical Department of Washington University. With introduction by **E. W. Saunders, M.D.** Second edition, revised and enlarged. St. Louis, Mo.: C. V. Mosby Co. (Price, \$2.50 net.)

The Golden Rule Series has established itself as one of the most valuable of its kind. This is evinced in that a second edition is being sent out of this particular book and, already, several of the set are either on the market or in process of republication.

Professor Zahorsky has devoted considerable time to the revision now presented and in making it he has incorporated in the text considerable matter which is absolutely new to it. The volume as it now stands is considerably increased in value and will interest not only new readers, but those who may have the good fortune to possess the first edition as well.

Progressive Medicine, Vol. 13, No. 2, June 1, 1911. Lea and Febiger, Philadelphia and New York. Three hundred and seventy-nine pages, illustrated. (Price, paper bound, \$6.00; cloth, \$9.00.)

The present number contains a discussion of hernia by Wm. B. Coley; of abdominal surgery by Arpad G. Gerster; of gynecology by

cology by John G. Clark; of diseases of the blood, diabetes, and the like, by Alfred Stengel; of Ophthalmology by Edward Jackson.

Being itself a digest of advances, discoveries and improvements, it is practically impossible to review this work thoroughly and we hesitate to select at random, any particular topic as a sample.

Progressive Medicine is by no means a short lived book, as the discussions, though based on current literature, are scholarly and thorough. We trust that some inventive genius will devise a binding material for this and similar works, more durable than thin paper and yet cheap enough to keep them within the reach of the mass of the profession.

A. L. B.

The Practical Medicine Series. Ten Volumes. Under the general editorial charge of **Gustavus P. Head, M.D.** Vols. I, II and III. General Medicine. Edited by **Frank Billings, M.D.** and **J. H. Salisbury, M.D.** Vol. II. General Surgery. Edited by **John B. Murphy, A.M., M.D., LL.D.,** Professor of Surgery in Northwestern University. Vol. III. **Eye, Ear, Nose and Throat.** Edited by **Casey A. Wood, M.D., Albert H. Andrews, M.D., G. P. Head, M.D.** Series 1911. Chicago: The Year Book Publishers. (Prices, \$1.50, \$2.00; entire series, \$10.00.)

These three volumes show continued excellence of the series and there is nothing lacking in them which would tend to make for their completeness. The volume on eye, ear, nose and throat was prepared by C. A. Wood, Albert H. Anderson and Gustavus P. Head. It is excellently illustrated and most complete in its exposition of the specialties dealt with. General medicine, under the supervision of Frank Billings and J. H. Salisbury is without flaw. There is special stress laid upon diagnosis. Dr. John B. Murphy had prepared the volume on general surgery and as a result it is one of the most complete of the series. With Murphy's well-known careful attention to detail the volume rests well within the lines of perfection.

1,000 Surgical Suggestions. By **Walter M. Brickner, B.S., M.D.,** Adjunct Surgeon Mount Sinai Hospital, Editor in Chief "**American Journal of Surgery.**" Fourth edition. 12 mo. pp. 225. New York: Surgery Publishing Co. 397 pages. (Cloth, \$1.00.)

The first edition of this handy little volume was issued in 1906 and since then four issues have been necessary. It has been thoroughly revised and there has been a considerable enlargement of the material contained in its pages. Over 300 suggestions have been added. It is excellently put together and will be of value.

Health Hints. By **E. R. Pritchard,** Secretary of the Chicago Department of Health. Small 12 mo, pp. 153. Chicago: The Reilly & Britton Co. (Cloth, 50 cents.)

Although there are only 154 pages in this little book it is of great use written as it is in simple language and designed to

be of especial value to the people at large. It discusses air and breathing, cleanliness, contagion, consumption, eating and digestion, food for infants, infections, light, rest and sleeping, out of doors life, sanitation, water and the care of school children.

Tuberculosis, as a Disease of the Masses, and How to Combat It. By S. A. Knopf, M.D. Awarded the International Prize by the Committee of the International Congress to Combat Tuberculosis as a Disease of the Masses, which convened at Berlin, May 24-27, 1909. Seventh edition. New York: The Survey; also for sale by F. P. Flori, New York. 1911. (Paper, 25 cents.)

The above data are the best credentials of this work, which is recognised as authoritative.

MISCELLANY

THE Buffalo General Hospital, having instituted an automobile-ambulance, has generously donated its old horse-drawn vehicle to the hospital association of the Tonawandas.

THE American Institute of Homoeopathy, at its annual meeting June 26-30, elected Dr. Thomas H. Carmichael of Philadelphia, president; Dr. William H. Dieffenbach of New York and Dr. Clara E. Gary of Boston, vice-presidents.

DR. Thomas S. Crowe of Chicago, official physician for Cook County, advocates legislation requiring landlords to furnish fly screens for all doors and windows. The hygienic value of screens needs no discussion but it may not be out of place to point out that the tendency, in this country, to impose not only most of the direct taxation but all sorts of obligations and responsibilities upon property owners, instead of upon tenants, creates irresponsibility on the one hand, and, on the other, gradually confiscates capital by making it unproductive and thus discourages home ownership. This fact should be borne in mind in all legislation regarding buildings.

IF we give an individual with an unbroken bronchial mucosa the salicylates and then test the secretion we obtain from the bronchi for salicylic acid, we get no reaction. But when the mucosa is broken or an inflammatory exudate is present, salicylic acid is found in the sputum, as in pulmonary tuberculosis, pulmonary abscess and gangrene, and the like.

The test is performed as follows: 30 gr. of sodium salicylate (pure natural) are given in ten grain doses after meals and the sputum collected 12 to 15 hours later. The sputum is acidulated

and shaken with 95 per cent. alcohol to precipitate the albumins and mucin, which do not carry any of the salicylates. Filter out this precipitate and alkalise the filtrate and evaporate. Redissolve the residue in slightly acidulated water and add lead acetate. This causes another precipitate to form, which is again taken out by filtration. This filtrate is then extracted with ether. The ethereal extract is evaporated and tested by adding about ten c.c. of water and one c.c. of a 10 per cent. solution of ferric chloride. A violet color denotes a positive reaction.

MILK of Bismuth is manufactured by the well known pharmaceutical house of Eli Lilly & Company, Indianapolis. It is an antacid, astringent, antiseptic and gastric sedative.

Each fluid ounce holds in simple suspension, in distilled water, the bismuth equivalent of 20 grains bismuth subnitrate. It is free from sugar, gums, preservatives and other impurities.

The value of the insoluble bismuth combinations on inflamed and irritated mucous surfaces lies in their coating power, giving mechanical protection. The coating power increases with the fineness of subdivision and the lighter and bulkier the bismuth precipitate, the finer the subdivision and the greater the coating power. For this reason the precipitate in Milk of Bismuth, Lilly, is made very light and bulky, consequently each fluid ounce is equivalent to only 20 grains of subnitrate; at the same time its coating power is greater and more efficient than the usual preparations which contain 40 grains.

Milk of Bismuth, Lilly, agrees with sensitive stomachs and will be found very effective in the treatment of acute, subacute and chronic gastritis, intestinal inflammation, diarrheas, dysentery and similar disorders.

It is supplied by the drug trade in one pint, five pint and one gallon bottles.

ACTING Census Director Falkner has received from Dr. J. A. Hill, chief statistician for revision and results, in the census bureau, a preliminary count of the population in institutions comprising prisons, institutions for juvenile delinquents, almshouses and institutions for the insane and feeble-minded. The enumeration includes the number present in the institutions on January 1, 1910, and the numbers admitted and discharged during the year 1910. A few institutions still remain to be heard from.

According to this preliminary count the prison population on January 1, 1910, was 109,311; the admissions or commitments to prison during the year 1910 were 462,530; and the number

of prisoners discharged during that year on account of expiration of sentence, or other reasons, including also deaths, was 458,996.

The last previous census of prisoners was taken June 30, 1904, and at that time the prison population was 81,772, and the admissions or commitments during that year 149,691. These figures, however, are not comparable with those for the year 1910, for the reason that the 1910 enumeration included cases of imprisonment for nonpayment of fine, while the census in 1904 did not include such cases.

Accordingly, the marked increase in prison population, and especially in commitments, does not reflect an increase in crime but is largely accounted for by this difference in the scope of the two censuses.

The census bureau will be able later to segregate from the 1910 figures the cases of imprisonment for nonpayment of fine and thereby obtain a figure which will be fairly comparable with the enumeration of six years ago. The larger number of admissions reported, as compared with the population present on January 1, is indicative of the fact that a large proportion of the commitments are for short sentences and for minor offenses. In the final census report the prisoners will be classified with reference to the offense for which sentenced and the term of sentence imposed.

The number of juvenile delinquents reported at the Census of 1910 in institutions for that class was 22,903. This differs but little from the number reported in 1904, which was 23,034.

The number of paupers in almshouses on January 1, 1910, was 83,944. The number admitted during the year 1910 was 106,457, and the number discharged or dying during that year was 100,858. In 1904 the pauper population was 81,764 at the beginning of the year; the admissions during the year were 81,412; and the discharges, or deaths, 77,886.

The enumeration of the insane in asylums indicates a very striking increase in this class of the population. In 1904 the number of insane in institutions was 150,151. In 1910 this number had increased to 184,123, an increase of 22.6 per cent. in six years. The number of commitments to insane asylums during the year 1904 was 49,622, and during the year 1910 was 59,628, an increase of 20.2 per cent.

In 1904 the feeble minded in institutions numbered 14,347 in 1910 the number was 20,199. The number of commitments to institutions for this class increased from 2,599 in 1904 to 3,848 in 1910.

DR. JOHN W. DRAPER (*Indianapolis Medical Journal*), made the first photographic likeness of any person in the country. The *Literary Digest* for May 13, says that the model for the first portrait which was taken in 1839, was Dr. Draper's sister and his substitute for the modern camera was an old cigar box with a spectacle lens. The subject had the pretty name of Dorothy Catherine Draper. Jacques Daguerre invented the process that bears his name. Daguerreotypes are now simply mementoes.

OHIO has recently strengthened its building laws by placing their enforcement in the hands of the State Fire Marshal, the Inspector of workshops and factories and the State Board of Health. A novel feature is the requirement for public buildings, of a plant capable of furnishing a uniform temperature of 65 degrees Fahrenheit, and of a ventilating system which shall change the air at least six times an hour. The new code applies not only to new buildings but to old ones when undergoing repairs.

Plain Truths About Advertisements

It costs about a cent and a half to reach a prospective customer by mail—two cents and a half if the envelope is sealed. It costs, averaging MEDICAL JOURNAL rates and circulation, from a quarter to half a cent to put before the customer as much space as a postal card and about half a cent to a cent to send him as long a message as it would be worth while to print, providing the message is sent through the columns of a medical journal.

It does not, as a rule, pay to try to get personal attention for an advertisement by passing it off as a personal communication at letter rates. If you get a man to listen to your business proposition by explicit or implicit misrepresentation, it is not unreasonable for him to fear that you will misrepresent and fool him in the business itself.

Advertisements by mail, reach the prospective customer at a time when he does not want them and they are usually put where he cannot find them. Acres of swampy land in cities are raised in level and made habitable by the contents of waste baskets. An advertisement in a journal is convenient to the customer, in time and place. Many physicians look over the advertisements as thoroughly as they do the technical contents of their journals.

Most of them study the advertisements for practical hints two or three times a year.

The manufacturer or merchant who advertises to his potential clientele in the periodicals of that clientele, is considering the convenience of that clientele. The man who advertises by dodgers and circulars is annoying the persons with whom he wants to do business. Dodger and circular advertising helps the printer and the collector of garbage, ashes and waste paper. Circular advertising perhaps helps Uncle Sam to maintain the postal service. Newspaper and magazine advertising helps the printer, the editorial worker of every grade, the publishing house, the reader of all kinds of current literature, indirectly the library, school and university. It makes possible, at low cost, a very important educational process among all classes of the community.

We want our readers to appreciate that every advertiser in this JOURNAL is helping to cut down the subscription price below what it could possibly be otherwise and is helping the JOURNAL to maintain and improve its standards of quality and quantity of reading matter.

We ask our readers to show their recognition of this fact by letting advertisers know, so far as is possible, that we are actually delivering to potential customers, the messages that the JOURNAL is paid to carry.

We also ask our readers for criticism in determining which of these messages are true and which, if any, are false. We cannot, off hand refuse to print an advertisement simply because of personal prejudice against a certain drug or instrument but we intend to limit our advertising pages to reputable and honest concerns.

SUMMER CASES.—Conditions peculiar to the season now with us will present themselves for your consideration and a reference to the fact that Antiphlogistine has proven of particular service in sunburn, bee sting, insect bites, sprains, bruises, and the like, will offer you a ready and satisfactory dressing and is procurable in all drug stores.

In those severe cases of dermatitis following undue exposure to the fact that Antiphlogistine has proven of particular service and the accompanying swelling and pain.

In all cases it should be applied thick and hot and well protected by ample covering.

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ORIGINAL COMMUNICATIONS

Conservative Ophthalmology

By F. PARK LEWIS, M.D.
Buffalo, N. Y.

THE title of the paper which I have been asked to present, conservative ophthalmology, is apt to be a little misleading and to require an explanation. The thought which it suggests is that all ophthalmology should be conservative. While this is of course, true, there are certain conditions which exist or which may arise which demand prompt recognition and immediate and proper attention or results follow which no subsequent treatment can remedy.

The importance of human vision is so great that the loss of even a portion of the sight which might have been saved, may so limit the usefulness of the person suffering such a loss as to change the whole course of his career. If for instance after an acute inflammatory condition of the eye, the patient emerges from the illness with but one half of his normal vision, or if after the healing of a corneal ulcer, absolutely normal vision for distance remains, but for the working range, by reason of the position of the corneal scars, is materially reduced, the general result would seem to be successful and the patient will have recovered but the limitation of vision will throughout his whole future life, prevent him from doing work which he might otherwise be qualified to do. It would limit his studies, if it occurred in childhood, it would prevent his adoption of any mechanical trade, requiring accurate vision, such as watch making, engraving or work of that kind. It would narrow his opportunities and circumscribe his possibilities in many ways.

Furthermore, injuries which are promptly and skilfully treated under certain conditions may leave almost absolutely normal sight, while delay or the application of improper methods may not only jeopardise the integrity of the vision of the affected eye, may not only result in blindness of that eye; but through sympathetic involvement of the fellow eye the result may be the absolute blindness of the patient. Happily modern methods have rendered such frightfully disastrous results far less common than they were a quarter of a century ago and still they occur often enough to make us realise that the employment of conservative

measures such as are designed by promptitude and efficiency to save human sight are important enough to receive consideration.

I want, therefore, to emphasise some of those conditions in which the early recognition is imperative if sight is to be saved. One of the commonest of these which we meet is ophthalmia neonatorum. Possibly so much has been said about this during the last few years that it will be necessary only to refer to it. There are some facts connected with it, however, which may bear repetition and concerning which I may say a few words. We all know how infection occurs in the earlier cases, but we forget sometimes that there is such a thing as a late infection. In other words, the mother having infectious discharges may at any time during the early life of the baby, may have the gonococci carried into the infants conjunctival sac. Even the general public is now becoming familiar with the nature of the infection, the methods of its prevention and the necessity of its early and prompt treatment. Still, when I say to you that in so progressive a center as that of Boston, of 116 cases, 114 occurred in the practice of physicians and only two under the care of midwives and of these 27 emerged with defective eyes and 9 were absolutely blind, we cannot say that the time has gone by when every one knows what to do for ophthalmia neonatorum.

If we are to control the disease of ophthalmia neonatorum, it must be by the concerted effort of the medical profession, the health authorities and the public. The following suggestions were made at the recent meeting of the American Medical Association to the department of hygiene and sanitation with a view of standardising methods of prevention which could be adopted in the several states. There seems to be little doubt that within the next few years, if activities continue, it will cease to be the serious menace that it has always been to the eyes of the new born.

"Blindness from birth infections has contributed one fourth to the population of all of the schools for the blind in the country. The existence of these infections is due to the failure on the part of the attendant, whether physician or midwife to use the proper preventive treatment for the child's eyes during the first few minutes after it is born.

Responsibility for this large amount of unnecessary blindness does not rest primarily upon the midwife and poor overworked doctor but it does rest upon society, which means every intelligent individual who knows what should be done and whose influence should be used to aid in the protection of these helpless babies.

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The organised movement which originated in the American Medical Association, has now reached every state in the Union. Six states are gratuitously distributing the preventive remedy to every midwife and physician. The broader form of organisation is urged in which representatives from the medical profession, social service workers and others shall take upon themselves to see that right laws are enacted where they do not exist and that they shall be enforced where they have been enacted.

Mothers and prospective mothers are urged to join in the movement which may properly be carried on through women's clubs and other organisations of women.

Not only should the protective remedy be gratuitously distributed by the health department of the state and cities but it should be accompanied by pamphlets describing the nature of the birth infection, the manner in which it may be avoided and the necessity of immediate treatment when infection has occurred.

This should everywhere be made a reportable disease. Failure to report such cases should be followed by public prosecution of those who neglect to observe the laws. The publicity thus obtained is at once a warning and a deterrent.

It is perfectly evident that birth infections of the eyes can be stopped if organised and continuous efforts are made with this end in view. A concerted movement throughout the United States would be effective in saving the eyes of hundreds that would otherwise become blind."

The three essentials are a sanitary toilet, the use of a prophylactic and prompt and efficient treatment when the disease occurs. Under such conditions there practically need never be the loss of an eye from this disease.

The second condition which results with great frequency in lowered visual acuity is strabismus or squint. It formerly was not at all uncommon for physicians to advise the parents of a squinting child to wait until the boy was 16 or 17 years old before undertaking to have anything done for his relief. At six or seven years, I have often found it impossible to restore the inturned eye to full visual acuteness. Nature is exceedingly unwilling that there should be useless functions. Strabismus is almost invariably due to the fact that the eyes are organically malformed. It is the function of the two eyes to blend the images which they receive into a single picture like that obtained by the stereoscope. If the two sides of the human machine are mechanically different, it is impossible to force the two images to perfectly merge the one into the other. In the effort to accomplish this, the eye having the higher defect, or sometimes

alternately, first one eye and then the other will be drawn in. When the two eyes are almost but not quite in line, double vision results. This is exceedingly uncomfortable. When the annoyance has persisted for a sufficient length of time, the eye which is turned in learns to suppress the image formed on that side. This is equivalent to saying that the visual center corresponding to the inturned eye has ceased to be active. When this dulling of a nerve center continues week after week for several years, the nerves in that portion of the brain cease to develop and we have in the corresponding eye, permanent amblopia. If on the other hand by correcting the focal difficulties so as to make the two eyes function normally, making the visual centers equally active on both sides, or if even we have an alternation of the squint so that one eye sees equally with the other, although its fellow may be turned in, we perpetuate the visual function and sight is preserved.

Whenever strabismus is found, it should be placed under observation at the very earliest possible date. I have myself prescribed glasses for a squinting baby who is only five months old. In another instance, in that of an infant a year and thirteen days old, whose eyes converge badly, high hypermetropia was found in each eye, but differing in amount. The strong glasses which were necessary to make that baby see and to straighten its eyes and which were determined by means of the ophthalmoscope and the retinoscope not only straightened the baby's eyes but gave the little sufferer such comfort, that two years later when the glasses had to be taken away in order to have the frames repaired, he begged to have them given back to him saying: "I want my eyes." That child will therefore, have normal vision in each eye, fitting him for any work that may be undertaken. Had the use of glasses been postponed until the eyes could not function normally the inevitable operation might have restored parallism, but it could not have restored vision and a correction so obtained would in all probability be followed by a divergence later in life.

Another condition which must have early recognition which fortunately is of rare occurrence but when neglected produces frightful results, is glioma of the retina. This is supposed to have its origin at birth, but develops very slowly during the first two or three years of life, but at four or at latest five years of age, it can be seen by the naked eye. It is malignant growth arising from the retinal tissue. It slowly grows into the vitreous sometimes in whitish masses in the form of a feather duster, sometimes like flocculent masses, until by the time it has reached

the posterior surface of the lens, it appears to the untrained eye like a cataract. When the light is thrown in by a mirror, milky masses may be seen in the deeper tissues of the eye. No pain exists with this until the eye ball becomes filled with the then rapidly developing substance. Then the pressure develops, tension increases and the child suffers periodically with attacks of pain. Later the pain becomes more intense and more frequent. Up to the present time, the growth is encapsulated into the eye and the removal of the eye which is the only known remedy will save the life of the child. But later, the growth breaks through the eye as it is sure to do and any operative measures are then likely to be too late. The orbital tissues have become involved and it rapidly passes to the brain. It grows like a mushroom from the orbit constituting the classical fungus hematodites. It penetrates the skull bursting its structure apart and destroys the life of the child with frightful suffering. Happily it occurs but once in ten thousand cases, but that one case may at any time come under the observation of any one of us and hard as it is to remove the eye from an apparently healthy child, it is the only thing to do and should be done at once.

Another phase of conservative ophthalmology is that which provides for the early recognition and treatment of injuries of the eye and especially those in which foreign metallic bodies are carried into the eye ball. It is astonishing how excellent results may be obtained when immediate care is given. A little girl was brought to my office direct from school. She was sharpening a pencil with the blade of the knife toward the face. Another child coming from behind her pushed her head forward and the knife entered the eye. When she appeared in the office, the iris had prolapsed and was protruding through the wound. It was cut off with a clean incision, making a perfect iridectomy. The eye was treated antiseptically, bandaged and within a week, the wound was perfectly healed. Subsequent tests showed that her vision was absolutely normal. The blade fortunately had escaped the lens of the eye. Had she waited 24 hours, the probabilities are that the wound would have become infected and even if the eye had been saved, it would have been at the expense of an inflammatory action with plastic deposits which would have permanently ended its usefulness.

It goes almost without saying that a hurt directly involving the eye ball with a break which may even be superficial, in its structure, should be made as completely aseptic as possible at the earliest moment after the injury because it is the epithelium which is the barrier which germs find most difficult of entry;

but it is not so commonly remembered that an early restoration of the tissues to as nearly a normal relation of their structure as possible within a few hours of the time at which the accident occurred, multiplies many times the chances of a successful issue. Twenty-four or thirty-six hours in which an open wound of the eye ball is left open to the entrance of septic germs may be quite enough to develop an infection which may result in loss of the eye.

FOREIGN BODY IN THE VITREOUS.

A young man nineteen years old while driving a nail in a tank at his home in Titusville was suddenly conscious of a blow on his eye. A chip of metal had flown from the hammer or the nail striking the middle of the upper lid and puncturing the ball. The wound was evidently a large one as the eye was full of blood. The physician who was called applied cold compresses—but in 24 hours the upper lid was dark and edematous and the eye ball highly infected and exquisitely tender and painful. Twelve hours later the case coming under the care of another physician its gravity was immediately recognised and he was dispatched by the first train for special advice and treatment. He reached my office in the evening suffering acutely. As there was reason to believe that the foreign body was still in the eye the magnet was carefully employed. At the end of fifteen minutes a buzzing sound was heard, indicating that a metallic connection had been made and gradually and gently a piece of steel weighing 10 grains and of the shape of a long triangle enveloped in ropypus was removed. There seemed little hope of saving the eye ball but the wound was irrigated with a two per cent. solution of protargol and the eye ball flooded with the same and the eye bandaged over an antiseptic pad. The wound healed rapidly and after two months treatment was wholly free from inflammation, only slightly smaller than its fellow. The extent of the inflammation and the duration of the treatment would both have been materially lessened if the sepsis could have been prevented.

RUPTURE OF SCLERA WITH PROLAPSE OF IRIS RECOVERY WITH SUBSEQUENT DETACHMENT OF THE RETINA.

One of the most common causes of hurts of the eye ball is from a glancing blow on a nail which may either result in causing the nail itself to strike the eye or for a chip from the hammer or nail to do so. A business man undertook to do a little repairing at home. Unpractised in hammering, he struck the nail head a glancing blow with the result that the nail flew with great force striking the right eye causing great pain and immediately

infusing it with blood. He was brought to my office within an hour when a rupture was found to exist at the corneal margin, the iris prolapsing. Without delay he was immediately placed in the office chair, the eye made as thoroughly aseptic as possible and the protracted iris excised. The clean wound healed with great rapidity and in a very few weeks normal vision was restored. After blows of this kind, however, the attachment of the margin of the retina to the sclera becomes insecure and three years later, while in California, he was suddenly taken with nose bleed which was protracted and profuse requiring radical measures for its relief. When it had been controlled, it was found that he had detachment of the retina at the point of the former wound with vision greatly reduced to merely a quantitated perception of light.

The condition is one which is more than likely to occur after a foreign body has been successfully removed from the vitreous even after several years have elapsed from the time of the original hurt and is a condition which must always be considered as a possibility.

But most important of any of the new kinds of work that have been done in regard to the saving of the eyes are those which enable us to use the giant magnet in retrieving bits of metal which have entered the deeper structures. The true nature of sympathetic ophthalmia is not yet understood, but we do know that foreign bodies left in the eye, not only jeopardise its own usefulness, but through sympathetic involvement, that of its fellow.

A foreign body within the eye, by means of special arrangement to be used with the x -ray can, in many instances be localised with almost absolute exactitude. The accompanying chart was made by Dr. L. Reu, whose skill in localising a foreign body by means of the x -ray has been tested many times.

In this particular instance, by a slight error in calculation, the foreign body was represented as being just outside of the eye ball in the vicinity of the ciliary region and above the horizontal meridian. It was known to be within the eye ball and was found at almost the exact point indicated.

Sometimes, however, by means of the giant magnet, the happiest results are obtained. An Italian workman came to me from Avon, some months ago. He had been engaged in cutting stone. There was every evidence that a foreign body had entered the eye. A small hole in the cornea, a puncture in the iris and a clot of blood in the vitreous which obscured a view of the eye ground were the three destructive points. He was taken to the

Charity Eye, Ear and Throat Hospital where we have a Haab magnet, operated by the electric light current and weighing about three hundred pounds. A bunch of keys thrown across the room, if they come within a foot of the point of the magnet, are immediately drawn to it. When this man was placed before the magnet, he immediately complained of a sense of pain, giving evidence that a metallic body was responding to the magnetic attraction. The manipulation was, therefore, very careful and gentle. At the end of ten minutes, a little bulging was seen at the edge of the iris. The magnet was thrown in such a way as to attract the body to the pupil. It could be seen approaching the edge and gradually slipping forward into the anterior chamber. A slight puncture was made in the edge of the cornea and a smaller magnetic point was produced and the tiniest piece of iron which had flown from the hammer was removed. It was certainly not more than one quarter of the size of the head of a pin and yet it was ample to have permanently destroyed the sight. This case was a most unusual one in the absolutely normal restoration of vision. Ramsey, the celebrated Scotch ophthalmologist in his classics on Injuries of the Eye, says that he has never seen a bit of metal recovered from the vitreous with perfect vision restored.

Another instance in which a bit of metal had remained in the eye for twenty years without exciting inflammatory reaction, about two months ago was found to be causing acute attacks of pain. These were controlled but occurred again for six weeks, at the end of which time the pain was constant. In this instance, the magnet gave no evidence whatever, of the existence of a foreign body although the *x*-ray picture located it with absolute precision. The eye was opened at the point in which the foreign body was shown to lie. The vitreous humor was found to have become fluid. The eye had of course been absolutely blind through all of these years. Still this strong magnetic attraction exercised no effect. The eye was removed and opened and the foreign body found so tightly impacted in a dense mass of cicatricial tissue that it still was not affected by this strong magnet and it was only when the foreign body had been exposed and placed almost at the tip of the magnet, that it was slowly drawn out of the tight grip in which these thickened structures held it.

Had the magnet been in use when the injury occurred, twenty years ago, there is no reason to doubt that the eye ball, at least, could have been saved, even if the vision had been lost.

454 FRANKLIN STREET.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

Routine camp life now went on for several days, during which time we heard of Grant's victory at Shiloh. Lieutenant Hickmott preferred charges against me about this time for alleged neglect of duty, in refusing to attend one of his men in the night, who shot himself purposely, as I believed, to escape duty, causing only a slight flesh wound of no special importance. The weather was rainy and unpleasant up to April 11, when the sun once more appeared; but, meanwhile, the roads had become almost impassable, rendering it extremely difficult to get up our stores, which were brought from Newport News, eighteen miles distant, in wagons, twenty-four hours being required to accomplish the distance.

Fatigue parties in large numbers were sent out to corduroy the roads, and a highway was finally constructed to Ship Point on the James, seven miles distant, where a depot of supplies was established. On the 11th I took two loads of sick back to Young's Mills, where a hospital had been established in the rebel barracks left there, and Dr. Russell, of the 5th Vermont, placed in charge. Our position is now before Lee's Mill opposite the enemy's right, which is protected by water, dammed at intervals to deepen the stream. On the 16th a reconnoissance was made at Dam No. 1, between Lee's and Wynn's Mills, where General Smith tried to force a passage and attack the works, or develop their strength. He did the latter. Brook's Brigade of Vermont troops was assigned to the duty, our brigade in support. It proved unsuccessful as far as getting a foothold in the works, but some important information was obtained. The 3d Vermont lost seventy-five men, of whom twenty-two were killed. I saw General McClellan on the field in conference with General Smith about four o'clock P. M. We returned to our camp about six o'clock P. M. without casualty.

Colonel Bidwell returned to the regiment on the 18th, looking thin and pale, having lost about fifty pounds of flesh during his illness. On the 19th the 49th took its turn in support of the batteries for the night, and I went along to look after any sick

or wounded who might require medical services. Lieutenant William McLean of the 5th U. S. cavalry, formerly of Lancaster, accompanied me, and we busied ourselves trying to keep dry, for it was a rainy night, whiling away the time as best we could in story telling and smoking. McLean's squadron was assigned to duty with General Smith, and, as there was very little opportunity to use cavalry in our present position, he became a frequent visitor in our camp, many of the officers of the 49th being his acquaintances. He was a genial companion, a good campaigner, and a valuable officer. Lieutenant, afterwards General, Custer often came with him and spent an hour or two with me. They were fast friends, and both brave even to audacity. The night referred to, when we were out with the battery supports, was a most inclement one, dark and, at intervals, the rain fell in torrents. The pickets became alarmed several times during the night, and blazed away at each other, the batteries occasionally belching forth their deep bass intonations, to vary the musical (?) sounds. The flashes of the guns athwart the deep darkness of the night, simulated lightning, and the bullets flew over our heads at times in great numbers, sounding like hailstones against the great forest trees. It was a most uncomfortable night, yet we got back to camp next morning without casualty. I was, however, nearly sick for two or three days afterwards, though I very soon recovered my wonted vigor. I had not yet been off duty a day by reason of illness since entering the service, this being the nearest thereto that I had yet come.

On April 23, Governor Sprague, of Rhode Island, paid General Davidson a visit, accompanied by General Stoneman of General McClellan's staff, and a troop of cavalry. He wore a military cap, blouse, and sword-belt, and attracted considerable attention by reason of his prominence as a "War Governor," who had equipped and sent out a regiment at his own expense, when the government experienced its first trial. After partaking of General Davidson's hospitality for nearly an hour, the party proceeded on its tour of inspection. About this time several of the subaltern officers resigned and there was considerable disaffection in the regiment; but it disappeared very soon after the siege was raised.

Large siege guns were now being brought up and placed in position, and operations were pushing with vigor. Dr. Hall returned on the 28th, much to my gratification and relief, for, since we left Camp Griffin, I had been in medical charge of the regiment, and felt the burden of my responsibility to be rather heavy, particularly during so much activity of movement. I received

visits during these days from Dr. Frank H. Hamilton, Dr. Joseph Robinson, of Hornellsville, and Lieutenant Charles O. Shepard, of the 82d N. Y. On the 24th an order was received designating the camp as "Winfield Scott"—the name to apply throughout the army during the siege. While we were here my court-martial trial, on the charges preferred by Lieutenant Hickmott, was called at Brigade Headquarters one day; I went up, with Quartermaster Tillinghast as counsel, to defend the case, but, for some reason or another, the complainant failed to appear, and the Judge Advocate dismissed the case. The paymaster appeared on the last of the month and paid us for January and February; but I discounted my rolls for March and April, in addition, and thus obtained four months' pay, the first I had received since the November and December payment. This enabled me to discharge all my indebtedness and send \$250.00 to my wife.

May 1. We are comfortable for the first time since leaving Camp Griffin, as Dr. Hall brought two tents with him from Washington, which we have appropriated to our own comfort, using one in part for the official headquarters of the surgeons. He brought four other tents also, which have been distributed amongst the field and staff officers, so we are all very well provided with quarters. I took my trousers off tonight on going to bed, the first time I have done so in six weeks. We are but half a mile from the rebel lines, no fires are allowed after dark, and not a drum has been sounded for a month. If our precise position were known to the enemy, we should probably be shelled out, or, to say the least, be kept in a constant tension of dread of such possibilities. From three to five men are shot daily within a thousand yards of our camp, but the 49th has been fortunate thus far in not losing a man, since our losses of the first day we came up here. Firing is constantly heard on all sides, chiefly at working parties of our inclining or theirs. Saturday night, May 3. The batteries all along the lines are firing every two or three minutes, mostly from siege mortars and 100 pound Parrott's. Everything points to a general bombardment soon, but the firing tonight appears to be simply practice for range. Seven mortars are within a short distance of our camp, two of which were placed in position today. We turn-out in line of battle from one to three times a day, and nearly every morning at daylight there is an alarm of some kind, which brings the whole division to arms. Lieutenant McLean stayed all night with us again last night, a thing which he is in the habit of doing frequently, and we enjoy his visits very much. He generally brings some important news whenever he comes, which is always acceptable.

WILLIAMSBURG.

When we awoke Sunday morning, May 4, we found the enemy had evacuated his whole line of works during the previous night, and appeared to be in full retreat upon Richmond. We were put in immediate pursuit, and passed through their fortifications which were very formidable. In their deserted camps were found quantities of rations and camp equipage, including flour in barrels, beans, camp kettles, a few tents, and the like. Baggage wagons in large numbers were also secured, and many stragglers were made prisoners. We passed General Magruder's headquarters about ten o'clock A. M., and overtook the skirmishers of their rear guard at two P. M., or thereabouts. Our division had the advance, and the 49th was the second or third regiment in column. About noon I was sent back to our late camp with some orders, and, returning, caught up with the troops about three o'clock P. M. By dark we had driven the skirmishers well into Williamsburg, the 6th cavalry suffering a loss of probably fifty killed and wounded. I dressed one of the wounded by the wayside in the twilight. We rested on our arms that night in line of battle in a wheatfield; Colonel Alberger and I seeking the shelter of a little clump of trees nearby, and spreading our blankets together for the night. We were awakened about four o'clock A. M. by rain falling in our faces, and at daylight the troops were up and in line, though it rained as hard as ever it could pour.

Hooker, whose division had come up in the night and was placed on our left, pushed his skirmishers forward into the woods beyond at daylight, and soon found the enemy strongly entrenched behind a slashing of heavy timber. The fighting began at once, and kept up all day. At ten o'clock Hancock's Brigade with two regiments of ours, by a detour to the right, was swung around on the left flank of the enemy, capturing two deserted redoubts which commanded the position in front of Hooker. As soon as this was discovered Magruder ordered six regiments to charge Hancock's line, which they did in right gallant style. Hancock reserved his fire until they were well upon him, then delivered it fairly in their faces, driving them back in great confusion with heavy loss. It seems that Hancock had asked to have the remainder of the division sent to his support, but Sumner, who was in command, refused to comply. Meanwhile, word was sent to General McClellan, who had remained at Yorktown to superintend the shipment of Franklin's Division by water to West Point, of the situation early in the afternoon, and at four o'clock I saw him ride upon the field, accompanied by the Prince

de Joinville, the Count of Paris, the Duc de Chartres and others of his staff, the whole party literally covered with mud. Smith was promptly at his side and obtained consent to join Hancock; we were off at once, but by the time we got there the affair was over, and darkness was upon us as well. I saw the body of Lieutenant Colonel Baddam, of the 5th N. C., lying in one of the redoubts, his forehead pierced by a bullet. He was a young man, handsome, and of splendid physique. He was heard to say, just at the climax of the charge, "Now we've got the d—d Yankees, give them Bull Run and Ball's Bluff." I stood around a fire all night, for it rained hard, and tried to dry my clothing and keep warm, but made no attempt to lie down and sleep. The men slept in the rain and mud as best they could, and when morning came we found the works abandoned and the enemy in full retreat.

The field was covered with the enemy's dead, and we had over one hundred of his wounded in our front to care for. I went over the field Tuesday morning, the 6th, and helped gather up the wounded which we carried to a large barn nearby, where the same afternoon I assisted in making the operations. Here we amputated ten legs and several arms, the most serious cases having been left on our hands by the hastily retreating foe. I visited Williamsburg on the 7th, where I saw between four and five hundred more of their wounded, distributed to the various churches and William and Mary College. Twelve surgeons were sent into our lines by Longstreet, including his medical director, Dr. Cullen, to look after these wounded. I had an opportunity to talk with some of the prisoners, which was the first time that experience had come to me, and also obtained some of their currency which I sent home. They say very little, though enough for me to infer that the men—the private soldiers—don't take as great heart in the war as their officers.

McClellan paid our command a visit, and complimented Hancock and his troops, on their soldierly conduct and success. In going over the field again on the 8th I saw dead rebels lying all through the woods behind logs and stumps, and graves were thick and numerous. This was my first experience in going over a battle-field immediately after the action, and it impressed me greatly. Our own dead were very well buried, but the enemy's were more hastily and imperfectly done. The wounded of Smith's division, together with those of the enemy which fell into our hands, were placed on board the steamer "Commodore" and sent to Washington. The wounded in Williamsburg—four or five hundred—were left there in care of the rebel surgeons,

who were sent into our lines for that purpose. Some of the doctors were quite intelligent looking men, but most of them were shabbily dressed, and were only to be distinguished from civilians by the letters "M. S."—signifying medical staff—on their hats. Williamsburg itself is a sleepy old village of probably two thousand inhabitants in time of peace, many of whom, however, had now retired with the rebel army, so it was quite deserted except by the army of temporary occupation. A State Lunatic Asylum is located here which, together with William and Mary College, affords it some distinction. Lieutenant McLean paid us another visit on the 8th, and was in his usual good spirits.

THE MARCH UP THE PENINSULA.

Friday, May 9, we started at six o'clock A. M. and marched nineteen miles over the road on which the rebels retreated, camping for the night at, or near, Burnt Ordinary, a small country P. O. We passed broken wagons stuck in the mud, some of them partly burnt, caissons, and other war material which was dropped in the haste of retreat, and our cavalry brought back squads of prisoners captured from the rear guard. At Burnt Ordinary I "captured" a large quarto volume of Quain's anatomical plates, from the house of a doctor which the cavalry had gone through. The book I found in the yard, and still have it in my possession as a part of my library. (Now in the library of the University of Buffalo.) Saturday, May 10, we marched fifteen miles, starting before five o'clock in the morning, and at night were said to be but thirty-two miles from Richmond. Smith's division had the advance, our brigade moving in front. We camped for the night on a field where the cavalry had an engagement the day before, and our pioneers buried eighty dead—sixteen of our own men, and sixty-four of the enemy. The men are constantly capturing stray horses, and Dr. Hall and I have taken one in partnership to carry our extra blankets, forage, rations, and the like.

On the 11th, Sunday, it was rumored that Adjutant Bullymore, who left us on the 3d, while we were before Yorktown, had died at Fort Monroe. This rumor was, unhappily, confirmed by a letter from Quartermaster Tillinghast the same evening. This was a sad blow to us all, for Bullymore was a promising young officer, whose friends were legion. Our double sorrow consisted in losing our genial Quartermaster, H. D. Tillinghast, who went to Fort Monroe to take Bullymore, and also to have his teeth repaired. He went to Buffalo with Bullymore's remains, sickened and, on May 29th, died there; so he never came back to us. The loss of these two officers from the staff, so

suddenly and so near together, shocked us in the extreme, and was a damaging blow to the regiment as well.

We are now near New Kent, C. H., and on the night of the 11th, I went to West Point, twelve miles distant, with a load of sick for shipment to Yorktown. I was out all night, returning to camp just as reveille was sounding. Harbeck, our genial sutler, resigned about this time and I sent my porcupine fish by him, when he went home. William Woodruff was appointed sutler in Harbeck's place, and, though a good business man, he was not as popular as his predecessor. On the 14th I was attacked with neuralgia in the face, and was off duty until the 16th from that cause. We were then at the White House, where we remained until the 19th. The Custis Estate, where we were encamped, was formerly owned by General R. E. Lee; it was here that George Washington courted and married his wife, and it is one of the finest plantations I have yet seen. While we were here the 5th and 6th provisional corps were formed, commanded respectively by Porter and Franklin. Smith's becomes the 2d division of the 6th corps, Slocum's division being the 1st.

On the 19th we marched nine miles farther towards Richmond, being now but sixteen miles in direct line from that city. We passed through some beautiful country today, untouched hitherto by the devastation of war,—fields of grain nearly ripe, fine residences, and elegant plantations. Tonight for supper we had duck, eggs, and strawberries, all the products of the country. We moved five miles on the 20th, and still live on the country principally—I speak of our own mess—sweet potatoes (new), eggs, and chickens being the chief articles of our cuisine at present. We engaged another, and I hope a better cook today—one who formerly cooked for General Smith, and who understands his business thoroughly.

Thus far into the bowels of the land have we marched without serious impediment, and are under orders to march again at three o'clock A. M. tomorrow, our brigade to take the lead. Our mails are very irregular now, and it is three days since we had the last one; so we are pretty hungry for news from home. A march of eight miles on the 21st brought us to Cold Harbor, a spot destined to become historic from the fact that two of the severest battles of the war were to be fought in its vicinity. It is simply a crossroads, with a country inn, and a smithy. General Stoneman sent up a balloon about two miles in advance of us this morning, to reconnoitre the enemy's position. Major Johnson is not well these days, but I hope he is not seriously threatened. He is a brave man and a sterling officer—it would be a pity

to lose his valuable services (he afterwards became Lieutenant Colonel of the 49th, and was mortally wounded in the defense of Washington, July 12, 1864, dying a few days afterwards). I am in good health and spirits myself, and the regiment is reputed one of the healthiest in the division, and the strongest in the brigade. Dr. S. S. Mulford, of the 33d, visits me often, and he is in good health and spirits also. He is a good campaigner, and an excellent companion.

MECHANICSVILLE.

We remained at Cold Harbor until Friday, May 23, when the 3d brigade made a reconnoissance towards Mechanicsville, supporting General Stoneman's cavalry. Late in the afternoon, after marching about five miles, a battery opened upon us. Our artillery soon silenced it after exchanging a few shots, when we crossed a creek and slept on our arms that night, without anything to eat. Next morning, the 25th, we stood to arms at daybreak, soon advanced and drove the enemy out of Mechanicsville in a drenching rain, the brigade losing three men killed, and five or six wounded, mostly from the 33d and 77th regiments. Our regiment did not lose a man, though it was under fire for an hour or more. Mechanicsville is a hamlet five miles north of Richmond, consisting of half a dozen houses, most of which suffered more or less from our artillery fire. We took possession of a beautiful grove in the rear of the principal residence, and there remained over Sunday. Our supplies reached us at night and we made ourselves quite comfortable again, though we were without tents. During Sunday, the 25th, we picketed one side of the Chickahominy, and the enemy the other. The river runs in a valley, the hills rising on either side. At intervals during the day we saw carriages containing ladies, on the opposite hills, who had come out from Richmond to get a sight of the hated Yankee troops. I am in possession of a saddle captured from a "Secesh" cavalryman at Mechanicsville, which comes in play for our extra horse. On Monday, May 26, bright and early we were relieved by another brigade, and returned to a position near Gaines's Mill, four miles east of Mechanicsville. So the first Mechanicsville affair was at an end. I visited the place in the autumn of 1886, and sat down upon a log in the same grove in which we passed Sunday, May 25, 1862. The *Century Magazine* for June, 1885, on page 313 gives a good illustration of our conquest of the place. The artillery referred to in the title of the picture is the artillery which the 3d brigade of Smith's division was supporting, as I have described.

The end of May was now fast approaching, and it finally came without special incident to the 49th. It rained hard on the

afternoon and night of the 26th, and on the 27th the entire regiment was sent out on fatigue duty, chopping trees for timber to build a road across the low ground on either side of the river, apparently preparatory to crossing. The pontoons went down to the river bank on the night of the 26th, and a bridge will doubtless be laid very soon. I picked up a snake skin near my tent this morning, which I propose to send home as a relic, and as indicating the two-fold character of the danger we are in. Heavy firing was heard all the afternoon of the 27th, in the direction of Mechanicsville, but we are unadvised as to its cause.

Dr. Hall's health is quite poor, and has been so for some time, which adds to my duties and responsibilities very much. Major Johnson is, however, in better health than he was a few days ago, and I trust will soon be as strong as ever. Dr. S. B. Hunt wrote a letter from Fort Munroe, which was published in the Buffalo papers, in which he speaks of having seen Tillinghast at Old Point; the papers have just been received, and we have been much interested in reading the doctor's newsy account of his visit with "Till." I see Dr. Hamilton quite often these days, as he is medical director on Franklin's staff, and so comes around both socially and officially. On the 28th we had news of Porter's fight at Hanover Court House, which accounts for the firing we heard yesterday. Dr. Herrick sent a pail of lemons for the sick today, which was a comfort as the boys are fagged. May 29. I visited General Smith's headquarters today, where I saw a lot of prisoners captured by Porter on the 27th. Major Chapin, of the 44th N. Y., was wounded in that fight. (He subsequently became Colonel of the 116th, and was killed at Port Hudson in 1863. Chapin Place, out near the Park, is named in honor of him.)

May 31. We have not moved since we came to this camp (near Gaines's Mill) last Monday morning, which is the longest time we have spent in any one place since we left Yorktown. Today we hear firing over the Chickahominy on the left of the army, which sounds like a heavy engagement, and at night the shells burst over the tree tops, so we can see them quite plainly. Tom Dewey arrived in camp today, having been commissioned 2d Lieutenant in Company A under Captain Cluney. He is a valuable acquisition to the line officer list, and will, no doubt, distinguish himself. I went down to Dr. Gaines's today to see the rebel wounded whom Porter captured at Hanover C. H.; they are a sorry lot, and two rebel surgeons were caring for them as best they could. A severe thunder storm prevailed all last night, and one artilleryman is reported killed by lightning at Mechanicsville.

Sunday, June 1. The battle which began yesterday on our left, was renewed this morning and lasted until noon. It is known on our side as the Battle of Fair Oaks—the enemy call it Seven Pines. Surely, the Oak and Pine were contending. We have just received the news of the evacuation of Corinth, and all were very much surprised. The inquiry on every hand is, "Where have the devils gone?"

I saw Professor Lowe, the balloonist, yesterday and had quite a long conversation with him. His balloon is stationed near us. He tells me that he saw the rebel troops the day before, moving towards the field of Fair Oaks, and so apprised the commanding general. Major Washington, of Johnson's staff, was captured by our pickets a day or two since, and some important battle plans were found upon his person. This Sunday afternoon I went down below Dr. Gaines's, where there is an open field looking across the river, towards the scene of yesterday's battle, and on which Ayers's and Griffin's batteries are posted in battery. Both Ayers and Griffin were lying on the ground, directing the artillery practice and chatting about the war, and particularly of the rebel commanders. "Smith G. W." was the familiar name they gave General Gustavus W. Smith, who had succeeded to the command at Fair Oaks, upon the wounding of General Joseph E. Johnson. All day yesterday I was occupied with my monthly report, which must always be sent in promptly, lest there be complaints from headquarters. Tuesday, June 3. We were under orders to be ready to move at a moment's notice—not an unusual order nowadays. The whole regiment was startled today, by the receipt of the sad intelligence of the death of Quartermaster H. D. Tillinghast, at Buffalo, whither he had gone with Adjutant Bullymore's remains. Nothing could have surprised us more than this sad news; for it is but a month today since he left us well, excepting some trouble with his teeth which he went to Fort Monroe to have looked after. Mr. T. had the respect of both officers and men, and was not only a popular and efficient officer, but socially he was the best of companions, and he bore the name of "Gentleman" stamped upon his every act.

The rebel General Pettigrew, who was wounded on Saturday, has been brought to this side of the river, and is at Dr. Gaines's house where I am contemplating a call upon him. I sent home today a copy of the "Illustrated News," containing pictures of the hospital—barns at Williamsburg. I procured the admission of the artist inside the barns while we were operating, and was administering chloroform in one of the sketches which he made of the operations.

(Continued.)

Letters to Physicians

IV. Heterophoria Superstition

By GEORGE M. GOULD. M.D.
Ithaca, N. Y.

IN looking over and thinking of the case-histories of the patients of the last several years, I conclude that about fifty per cent. of the oculists of civilised countries utterly ignore their patients' heterophoria, that is, the balance or imbalance of the muscles. (When the heterophoria has developed into strabismus the interest, if it exists, is surgical only). Perhaps twenty-five per cent. work at the heterophoria problem through prisms incorporated in the lenses of the ametropic correction, or by prism-gymnastics, or by decentering lenses. A part of the remaining twenty-five per cent. proceed to tendon-tailoring at once if the patients' trust permits and his bank-book authorises. The residuum is so perplexed and uncertain that it flirts with the methods of one or the other classes, at last, from caution, securing safety by following the suit and lead of the fifty per cent. ignorers.

It is thus clear that in the ophthalmological specialty there is no unity, that nearly every authority differs from the others in advice and practice, and that anything approximating science is a ludicrous nonattainment. This is cruelly demonstrated by the fact that every oculist changes the glasses of his predecessor, and that if one-hundred should prescribe for the same patient each prescription would be utterly different from every other.

Patients come to me every day who have had the tendons of the ocular muscles clipped, or who are wearing prisms in their lenses, prisms of all degrees, and at all axes, for muscle-imbalance of all kinds, many of the latter being increased instead of neutralised by the reverse of the indicated prisms. And, of course, without relief of one of their old eyestrain symptoms. Most of them have been driven to coffee, tea, alcohol or drugs, to diet-crankery, to sanitariums, to (other than ocular) surgery, to "rest-cures," to gastrologists and neurologists, to chronic invalidism, to Eddyism, osteopathy, to despair.

Why? Because the tendon-tailors and prism-orderers have ignored, or disbelieved in, these truths long ago and frequently demonstrated:

1. In five minutes, by prism-gymnastics, one can give any patient almost any (temporary and changing) exophoria he pleases,—demonstrating the innervational not muscular (or tendon) nature of the anomaly, and the silly fallacy both of the prism-wearing and of tenotomy, and the like.

2. The fashionable professional, or textbook theories of the origin of heterophoria, are all utterly false. There is no law of the relation of heterophorias to tendon-insertions, or to convergence, or to myopia and hyperopia. The sources of heterophoria are astigmatism and anisometropia, with other contributing factors such as amblyopia, the writing posture, righteyedness and lefteyedness as related to righthandedness and lefthandedness, and the like,—in a word, to "Eyestrain" as properly understood, i. e., to the exclusion of the anatomy or powers of the muscles themselves.

3. No tendon-tinkering ever of itself cured any heterophoria, unless that of murdered eyes.

4. No prisms in the lenses worn ever of itself cured heterophoria.

5. What cured the heterophoria, if it was cured, was the extinction of eyestrain by the adequate correction of the ametropia.

6. Not one in a hundred patients have their ametropia rightly corrected. The reasons for this failure to diagnosticate and prescribe for ametropia would require a big book to set forth. But the chief are:

1. Nine-tenths of oculists have not the tools whereby the most expert man in the world could diagnose ametropia.

2. The prescribing of glasses requires a skill, and patience, and self-sacrifice possessed by but few men.

3. The opticians' work by bungling and maladjusting will usually succeed in making even correct lenses—do more harm than good.

4. The vanity and carelessness of uninstructed and unwatched patients will also usually render good or bad spectacles of little good and often of evil.

Only an endowed, scientific, and thoroughgoing Refraction School will be able to rectify all these evils through educated young men filled with the living religion of preventive medicine.

Of hundreds of cases that illustrate the verity of the foregoing I append two:

A woman, aged 39, came to me September 22, 1910, having had headaches since a child. She has submitted to two mastoid operations. Her head gets sore when she strains her eyes; even her teeth then ache. It hurts her to look at anything attentively. The tendons of some of the ocular muscles were scissored some

eleven years ago. She has worn prisms for seventeen years. She has been treated for sinus-diseases. She has long had intense pains in her shoulders, and the like, ascribed to her "nerves" by her physicians. The list of her oculists includes a number of the most famous ophthalmologists. I found her wearing:

R.+S.0.50—C.1.75 ax.180°2° Prism B.O.)
L.+S.0.75—C.2.75 ax.180°1.5 Prism B.O.(

Fix, now, that correction in mind and compare it with what this woman's eyes plainly demanded, viz:

R.—S.0.25+Cyl.0.50 ax.75°=20|20+
L.+S.0.25—Cyl.2.75 ax. 5°=20|20+ Distance .
R.+S.0.75 & Cyl.)
L.+S.1.25 & Cyl.) Near In bifocal spectacles.

Think of a right-eyed woman wearing such a right lens as that ordered for her! What could the abused visual mechanism do with such a glass except to turn the eye any way to be rid of it. *Hence the 19° of esophoria* I found present.

Under correct lenses, this woman's esophoria began lessening. Possibility of physiologic binocular vision had not been lost despite all that Nature had failed to do as regards the shape of the eyeballs, and despite all that man had been able to add to the difficulty and to the pathology. In a week the esophoria had been almost reduced to the desired normal, and the atrocious sufferings of a life were rapidly lessening. In view of the age of the woman the final complete cure, in so short a time, was astonishing. Usually the ominous age of 40 makes cure within a year very unusual. But before this year has fairly begun, and taught or advised by physicians, the patient usually will rush off to the Professor of Head-Surgery, or to the insane asylum, or the "Home," or to Mrs. Eddy, or to the German "Cure," and therefore remain forever uncured. The art of practising rational therapeutics in all such cases is the art of keeping patients patient until the old injuries have been healed by correct lenses.

When the age is 44 it will probably take nearer two years to effect a cure even in those with less thoroughly ruined eyes and nervous systems. Such a case is that of a man who came to me about two years ago. With the onset of presbyopia at 40 the usual rise or increase of morbid nerve symptoms (universally unknown and ignored, but of awful significance) began. In this patient's case "*petit mal*" appeared, soon degenerating into typical "*grand mal*" epileptic seizures with biting of the tongue, and the like, becoming more frequent as nothing neurological or ophthalmological was proved of avail. The oculists consulted

gave him prisms, and changed the prisms frequently. I found him wearing, B.E.+Cyl.0.50 ax.90°. He has constant diplopia beyond near range due to an esophoria of 28° and hyperphoria of 3°. As usual his oculists had not ordered the highly desirable bifocals.

My prescription read as follows:

B.E.+Sph.0.37+Cyl.0.87 ax.90° Distance

B.E.+Sph.1.62 & Cyl. Near. In bifocal spectacles.

The patient returned to his far-distant home and I have not seen him since. In the few days of his stay the esophoria began to decrease, and the diplopia became less constant and noticeable. Fortunately, whatever else the patient may have done in his extremity and his despair, he did *not* follow the advice of some "subtemporal-decompression" operator, who, perhaps, jerks glasses off consulting patients and throws them vindictively into the corner. Instead of this, by an exhausting and burdensome correspondence, by encouragings, by exaction of constant reports, by fighting the quack epilepsy cures, by demanding consultations, by reports from other oculists (and keeping them from changing lenses)—I succeeded in holding my patient's confidence. He was too poor to make again the thousand-mile journeys to me. In a month he wrote of some lessening of the epileptic and other symptoms, especially the diplopia. In a year I secured the report of a local oculist saying that the esophoria was then only 12°; hopes began to mount. There was now no double vision. The reports said that the attacks were lessening in number and that the loss of consciousness was for a shorter time than ever before. Some six months ago the man's reports suddenly ceased. Gratitude ceases when the cure is complete. I hear from other patients who know him that there are no epileptic attacks now, and that he is perfectly healthy and happy.

SOCIETY PROCEEDINGS

The Evils of the Contract System

**Report of the Committee Appointed by the Medical Society of the
County of Erie to Investigate the Inethical Contract Practices.
Submitted at the Regular Meeting of the Society, June 19, 1911**

THE committee appointed to investigate contract work, wishes to report the result of its investigation up to date, and the remedy which it deemed proper that this society should adopt in order to eradicate this evil. We had not proceeded very far in our investigation, before we became aware of the

fact that "something" was "rotten in the state of Denmark." We found this evil to be so widespread as to necessitate careful and close analysis, making it impossible for the committee to hand in a complete report at this meeting. From the data which came under our observation, we estimate conservatively that, at least a hundred and fifty thousand people in this city alone, are entitled to professional services under unethical contracts. I say that our work is incomplete, made so by the magnitude of the evil, and the length of time at our disposal in which to cover it. But in justice to this society, we cannot offer any report without giving a specimen of the despicable, penny contracts held by many of the physicians of Buffalo. The following section relative to the duties of the physician taken from the By-laws of an organisation known as the Fraternal Order of Eagles, is self-explanatory.

SECTION 1. It shall be the duty of the Aerie physician to attend, prescribe for, and perform such surgical work as may be necessary, on all members of the Aerie in good standing and their respective families, also all visiting members and their families without extra charge, except in cases of confinement and primary venereal or chronic diseases, or disabilities existing at the time the member made application for membership.

There are two other organisations which offer contracts similar to the above that came under our notice. These organisations are known as The Loyal Order of Moose, and The Fraternal Order of Orioles. All these organisations exist throughout the country. We found that there are a number of other fraternal insurance organisations which offer contracts of a like nature operating in this city. Among these are The American Order of Foresters, The Order of Red Men, The Macabees and various other societies with peculiar appellations. We found that certain liability insurance companies have physicians under contract to care for their policy holders in case of injury. These physicians are paid a miserable pittance, primarily, to coöperate with the insurance companies against the poor, unfortunate who knowingly gets into the web which the greedy, cunning, and malicious spider has so craftily and slyly woven around him. This insectivorous professional cooperates with the liability insurance company at the expense of his innocent and trusting patient to prevent liability. This, in my opinion, is an offence which should be punishable by law.

We found that a number of the large corporations of this city have fostered a movement of their employees to form associations which are supported by regular weekly assessments, primarily, for their own benefit, and, secondarily, for the benefit of

their employees. The employee is the actual supporter of this association while the employer receives the greater part of the benefit. By this arrangement, the employer undergoes no inconvenience. The association supports itself. It hires a physician not only to care for its members when injured while at work, but also arranges to have the physician care for any of them for any physical disturbance which may arise during the time of the contract. In some cases they have hired the physician at a regular monthly salary to care not only for themselves, but for their families as well. They have had no difficulty in securing the services of a physician to engage in this admirable, lofty, and sublime work. Of course, the corporation sees to it that one friendly to its interests secures the position. It is absolutely necessary for the corporation to secure the services of an "honorable man" to perform the duties of this high office. He must work for the interest of the corporation and against the interests of the employees. Whenever there is an injury to any of the employees, the actual supporters of the physician, he must have the welfare of the corporation at heart, and do his best to prevent litigation. What a fine clock-wheel arrangement this is!—the corporation works its employees, the employees work the doctor, the doctor works the corporation, and they all work one another.

We found that practically the entire Italian male population of Buffalo is entitled to medical services under cheap contract, and that the doctors holding these contracts, in some cases, are caring for the families at cut-rates, and a few are giving medicine free of charge. This system has grown from bad to worse. As the field of competition increases, the younger physicians who are from year to year graduating from medicine, are taking up the work more cheaply than their predecessors. What is the result of this mad competition? The physician has thrown off the dignity of his profession and has stooped down to the acceptance of a mere pittance as compensation for his professional services. Of course, the number of patients he must call upon is great, and he cannot, therefore, render to each individual the medical attention required, for he must "Be up and doing," as he must utilise every minute to the best of his personal advantage. Under such a system, there is no incentive to do good work. The people do not realise their danger, and something must be done to educate them to the fact that, far from gaining any salutary advantage, they are committing the greatest folly. The doctors of Italian origin who are holding these contracts realise their mistake, and have given the committee to understand that they would only be too willing to give up their contracts were

it not for the fact that they fear that some of the American doctors would only too readily take up the work which they should abandon. Such is their plight, and, if these men make the sacrifice of their penurious positions, this society must do all in its power to prevent the niggard and avaricious medicaster from taking their place. Among the Polish population, the same system is in vogue, but we are not prepared to state the extent of it in this report.

Another phase of this work was brought to our attention. We learned that a large number of the department stores and other business places have associations which contract with the physician in the same manner. Indeed, this system has become so widespread that even a number of the labor organisations have adopted it as "a good thing." In the same manner, and at the same price, they hire the same kind of a doctor, undoubtedly unconscious of the fact that they are catering to a scab.

A certain institution which advertises itself as a hospital, engages in wholesale contracts for an infinitesimal amount, to care for its policy holders who may be individuals or families for any illness of any nature whatsoever. This institution has a dispensary where colored solutions under alphabetical labels are dispensed by an undergraduate. We have learned of still another method of securing "The almighty dollar." We learned that a certain Doctor Richardson, whoever he may be, and twenty other misleading physicians of the United States have prepared a very grandiose and elaborate work which they are handing out at the rate of ten dollars per copy, and charging two dollars extra which entitles the holders of the certificate to free consultation for a period of two years. There is a coöperative plan of procedure between the local representative agent of this erudite organisation and a certain leading drug store which enables them to most thoroughly complete the chain of their depredations. While this very idea smacks of the rankest quackery, yet, it is no worse than some of the other cheap contracts held by supposedly regular men. The only difference between them is that one is direct while the other is an indirect mode of procedure.

Another form of contract considered by your committee, is one which shall tax the efforts of that committee to obtain evidence. It was mentioned that some physicians are in the habit of contracting with their patients prior to their illnesses for sums varying from ten to one hundred dollars annually. If such practice is in vogue, it must be most heartily condemned. This gambling game deserves the severest criticism. The physician who practises it is unscrupulous and mercenary. It is an imposition

upon society, and, like all other inethical contracts, must be stigmatised with the utmost opprobrium.

We found that each railroad entering Buffalo has its surgeon under annual contract to care for its employees, or any one except a trespasser who may happen to be injured. We do not know the salary paid to these surgeons, but we understand that it is comparatively small for the services required. The action of the committee in attacking the contract system must not be misunderstood. We do not care whether the physician is overpaid or underpaid. We are attacking it, because the principle underlying it all is inethical, unjust, and, in every case, injurious to the profession in general. The surgeon who holds a railroad contract, holds it with the proviso that he coöperate with the railroad and work against the interests of the poor unfortunate who happens to come under his charge. This is, of course, a good thing for the railroad, a nice thing for the surgeon, since it nets him a yearly salary, but a very bad thing for the public. We found that, undoubtedly, this particular form of contract is the grandparent of the rest. In justice to our sense of fairness, we could not possibly take any action against the small offenders without attacking these polished violators of the ethical laws who are seemingly responsible for all the others.

We believe that the above covers concisely the whole of the contract system. The causes of these existing evils were offered by the committee, and are as follows:

1. Lack of knowledge of the ethics of medicine.
2. Professional jealousy.
3. Indifference of the older practitioners.
4. The example set by some of the older practitioners.
5. Overcrowding of the profession.
6. The tolerance of this state of affairs by all medical societies.
7. The commercialism of the age. The professional struggle not only for the "Almighty dollar" but also for the mite(y) cent.
8. The chief and absolute cause of all, however, we found to be the complete disorganisation of the medical body. This last cause which is the absolute, and the cause a priori is the one to which we must give our attention, namely, the disorganisation of the medical body.

This evil has been growing insidiously in all its various forms for some time, and has been passed unnoticed by the powers which should have throttled it in its infancy. It may be that the older members of the profession have been swollen with pseudo pride,

deeming such consideration beneath their dignity, or it may be that they have had no idea of the extent or character of this pernicious evil. Be that as it may, our investigation has disclosed a state of affairs tolerated or disregarded by the medical fraternity which should never have been permitted to exist. When the true state of affairs was brought to the notice of your committee, some were in favor of adopting extreme measures, but the more conservative element prudently advised the adoption of persuasive measures. The first action of the committee was to send out return postcards to every member of this society. As each member received one of these cards, you are all aware of its contents. In the short interval of ten days, two hundred and twenty-five cards were returned—all save three of which were in favor of this movement. The three cards against it bore no signatures. At the subsequent meeting of the committee, such happy returns as this showed us that the profession was alive, and, from the remarks on some of the cards, heartily willing to coöperate with the committee. The cards against this movement were without signatures, so that, whatever opposition there is to it, comes from those who have not the courage of their convictions. A second notice was sent to all those members who had not returned the card, reminding them that they had either overlooked or misplaced it, and up to the present date, we have three hundred and twenty members of this society pledged to support this movement. We are aware of some few men who are opposed to it, but only one of them has had the courage to sign himself against it. The committee charitably refrains from mentioning his name.

In the short time that this committee has had to act, it is sorry to say that it cannot offer a more complete report. Your committee shall not spare its efforts until every man is located who has the audacity to stand for such a system as has been brought to your notice. While almost two-thirds of the members are pledged to this movement, there yet remain about two hundred who have not stated their position, and the committee shall continue its investigation until every member has taken a definite stand. We believe that after every one who has not answered has been interviewed, there will be very few in the opposition. As the committee has been very conservative in the measure it proposes to adopt, it hopes that it will be heartily approved by this society. Many radical suggestions were offered, but, after much deliberation, it resolved to adopt the following:

Resolved, That the proposed amendment, if adopted, shall not apply to present contracts, but shall prohibit any extension or renewal of the same—except by action of the society, at a regular meeting, upon request of the interested physician.

Add a section to chapter II of the Constitution and By-laws to be known as section 13, and to read as follows: No one shall become a member of this society or continue as such who engages in contract work, unless it be governmental in character, but this shall not prohibit an agreement for a particular case nor apply to examinations for an adequate fee.

We further recommend: 1. That the president appoint from time to time at his own discretion, special committees to use their influence on any man who continues this inethical practice whether he be a member of this society or not.

2. That a special committee be appointed to confer with the membership committee to devise ways and means to get all desirable men in this society.

3. We recommend that the proper authorities of this Society bring this matter to the attention of the State Society for the purpose of gaining its support.

4. That this society meet more frequently, that its members become more united, and that self-interests be put aside for the common good of all.

We feel that the above resolution, amendment, and recommendations are not too radical. The various faddists, quacks, pseudo scientists, and charlatans, are the sins of our neglect. Are we going to commit more sins of omission? The evils dealt with in this report and practised by the supposedly regular members of the profession, should not be tolerated any longer. We must separate the inethical from the ethical practitioner. We must ostracise him as we have the advertising quack. Nay, we must do more. We must use antagonistic measures if persuasion fails to convince him of his error. The methods of antagonising him have been discussed by the committee, but it is not our purpose to speak of them in this report. We address ourselves so strongly because we feel sure that after all the cards have been returned, there will be very few offenders left. To these men we offer fellowship not only in this society, but through it, also to the society of the state and nation. The membership of this society consists of practically all the physicians of Erie County. Many of the men who do not belong to this society are those who have graduated from medicine within the last few years. and most of these can be easily induced to become members.

The above is the situation which is now confronting us. It is high time for us to separate the sheep from the goats. If medicine is a profession, if it stands for something more than mere commercialism, if it possesses every quality that is honorable and noble, then, we should do nothing to degrade it. We should rather raise it until it has reached the climax of ethics, and its standard has become the highest obtainable. But this

can never be accomplished by suffering the contaminating presence of men who engage in degrading work to remain within this or any other medical body. If there be any set of men who wish to continue this debasing practice, let them be separated from those who have enough principle and honor to deem such work beneath the dignity of the medical profession. We therefore recommend that this society use every possible effective measure to bring this about, and purge itself of all those who are unworthy to be regarded as its members. We have not been guided by animosity nor actuated by malice in arriving at our conclusion. We have no feeling of resentment toward any man. We have consistently considered big and little offenders alike. We believe in the utmost charity to all, for, even your committee, has among its members men who are or have been violators. Yet, in justice to our profession, besmeared in the mire of commercialism, we have been compelled to suggest the proposed amendment. With the confidence of honesty, we submit it for your consideration, knowing that the urgency of the situation demands every honorable man's support.

Edward E. Haley, Chairman; Albert T. Lytle, Charles R. Borzilleri, Harry R. Trick, Francis M. O'Gorman, Francis E. Fronczak, Lesser Kauffman, Arthur R. Gibson, Edward E. Koehler, Franklin C. Gram, Arthur C. Schaefer, Harry N. Feltes, Edward Clark, Marshall Clinton, Charles A. Wall, Hugh J. McGee, A. L. Benedict, Marcel Hartwig, Patrick J. Hurley, Henry J. Doll, Wilhelm Brauns, Edmund P. Reimann, Jacob W. Bayliss, William J. O'Donnell, Frederick Frisch.

ABSTRACTS

The Wassermann Reaction

PAUL FILDES (*Brit. Jour. Derm.* Jan. '11) reviews Boas' latest work on the Wassermann reaction and calls attention to its technical excellence.

Boas' endeavor has been to obtain constants in the case of all reagents except the serum to be examined and he, apparently, has succeeded. The nonspecific inhibition of hemolysis by non-syphilitic sera is determined by consideration of 1,064 investigations on a large number of diseases. He assumes that a serum which gives an amount of inhibition greater than that given by any non-syphilitic serum, *plus* the calculated technical error, is positive. The amount of inhibition is *actually measured* by Madsen's colorimetric method. His tests are *quantitative*. Five amounts of serum are used ranging from 0.2 c.c. to 0.01 c.c. This enables him to follow accurately the results from anti-

syphilitic treatment. Using older methods, the reaction may be found positive before and remain positive after a course of treatment with mercury, therefore the mercury has had no effect. With Boas' quantitative method the results is as follows:

0.2 c.c.	complete positive	complete positive
0.1 c.c.	complete positive	medium
0.05c.c.	complete positive	slight
0.02c.c.	complete positive	negative
0.01c.c.	complete positive	negative

He shows that in secondary, latent and tertiary syphilis and in tabes the reaction is less than half as strong in treated as in untreated cases.

His results in *all* cases are as follows:

Primary	75%
Secondary	97%
Tertiary	95%
Latent	37%

In a large number of untreated cases of secondary, tertiary and latent syphilis and tabes he obtained 100 per cent. of positive reactions which attests the excellence of his technic.

W. W. Q.

Hay-Fever and Its Treatment

BEVERLEY ROBINSON writes in *Merck's Archives* for May, 1911, upon this topic.

Speaking generally, the writer asserts he has had more satisfaction from a combination of camphor, oleoresin of cubeb, glycerin, and petrolatum than from any other local application. The above ingredients, when mixed, are in the form of a relatively soft ointment. They may be used, sniffed well up into the nasal passages, several times a day, and introduced therein either with the end of the finger or on a camel's-hair brush, before being drawn well up and backward into the nasal passages, and when they are felt in the nasopharynx the excess of ointment is hawked down and expectorated from the mouth. At present he is making use of the liquid petrolatum, and the ingredients become a thick, oily liquid instead of a soft ointment. These are sprayed by means of a glass atomiser into the nasal passages several times daily, or whenever relief seems to be much needed. The precise formula now employed by him is:

R Pulv. camphoræ, gr. x;
 Oleoresinæ cubebæ, m. xx;
 Glycerini, f3j;
 Petrolati liq., q. s. ad f3ss.

M.

In conclusion he adds that in his observation there is no health resort in the East which will invariably, and during successive seasons, accord absolute immunity to attacks of hay-fever. Further, this is also true of a sea voyage, even though it be a long one.—*Therapeutic Gazette*.

Movable Cecum

MOVABLE CECUM (P. Duval, *Paris Médical*, June 3, 1911), occurs mostly in women (75 per cent.), and during adolescence (between the 15th and 25th year of life). The condition is evinced by three symptoms,—colic, constipation and typhlatony with typhlectasia. The pain element predominates; the pains belong to the chronic appendicitis type of pains. On palpation there is tenderness at McBurney's point. The acute pains are accompanied by vomiting, pallor, a sensation of sudden exhaustion, nausea, and occasionally by loss of consciousness. They often cease abruptly when the patient changes his position. The chronic pains provoke a nauseous condition, loss of appetite and an apathetic state resembling that in the wake of intestinal intoxication. The constipation is varying, irregular, is not influenced by diet nor by treatment in general, and is occasionally interrupted by diarrheal attacks. Typhlatony and typhlectasia are evidenced by an examination of the iliac fossa. In lean subjects there is occasionally seen a curved distension in the cecal region. This curve may be the seat of visible contractions; one may be able to take hold of it and thus be able to ascertain its contours. It feels elastic to the touch like an air pillow. On palpation a large cecum, gurgling under the fingers, can always be made out.—*Archives of Diagnosis*.

The Non-Operative Treatment of Varicose Veins of the Leg

HACKETT (*Journal of the Michigan State Medical Society*, March 1911) thus describes the treatment advocated, which lies in the use of a boot composed of Unna's paste and ordinary gauze bandages. The paste is composed of the following: gelatin, white, 2 parts; zinc oxide, 2 parts; glycerin, 3 parts; aqua, 6 parts.

This is made over a water-bath, first completely dissolving the gelatin, then stirring in gradually the zinc oxide until it is thoroughly incorporated in the mixture, and last of all adding the glycerin.

Gelatin increases the plasticity of liquids with which it is incorporated, and it has unquestionable adhesive properties. Gelatin has been accused of causing tetanus, and in order to obviate

this risk it should be thoroughly sterilised at a temperature of 120° C. An inch strip of adhesive plaster is placed around the limb below and above, to mark the margin of the boot. The hot paste is painted on with a brush all over the limb from the lower to the upper adhesive strip, and the gauze bandage two and one-half or three inches wide is applied from below; the gauze is wound snugly once around and overlapped and cut by the surgeon, while the assistant does the painting. Two or three layers of bandages are applied in this way and the boot allowed to dry. An ordinary stocking and shoe may be worn over the boot and the patient return to work.

If there is much excretion from an ulcer, a small window may be cut through the boot in a few days and the ulcer dressed.

The application of the paste in this manner is antiseptic, healing, and soothing to ulcers and varicose eczema, and gives support to the vessels better than a stocking or elastic bandage.

The boot may be worn from two weeks to two or three months, depending upon the condition present.

It is surprising how rapidly healthy granulations spring up from foul and even gangrenous ulcers under this treatment.—*Therapeutic Gazette*.

The Treatment of Acne Vulgaris

BURKE (*Pennsylvania Medical Journal*, March, 1911) states that with stock vaccines he has not noticed any benefit in the treatment of acne vulgaris. After briefly alluding to the favoring conditions produced by constipation, anemia, and sluggish circulation, he advises puncturing and evacuation of all pustules by means of a comedone extractor, the latter instrument being employed for all comedones large enough to be seen. The face is scrubbed vigorously every night before retiring with green soap and hot water; thereafter rinsed with cold water and greased with an ointment made up of:

- R Beta-naphthol, 5 per cent;
 Sulphur prec., 25 per cent;
 Sapo viridis, 35 per cent;
 Adeps lanæ, 35 per cent.

This ointment is allowed to remain on for from fifteen minutes to an hour and then wiped off. In very obstinate cases, he advises x-ray under careful supervision.—*Therapeutic Gazette*.

Treatment of Erysipelas with Diphtheria Antitoxin

POLAK (*Klinisch-therapeutische Wochenschrift*, Jahrg. 18, No. 17) has used diphtheria serum in the treatment of erysipelas for

the past two years. In most cases the results have been surprisingly good. The fever sinks to normal in twenty-four to thirty-six hours and does not rise again, nor do any complications occur. Coincidentally with the fall of temperature the edema and redness disappear, and the appetite returns. In cases in which the temperature did not fall in two days a second injection brought it down promptly. Injection was made in all cases, even when treatment promised but little or when there was doubt as to the diagnosis between erysipelas and lymphangitis or other affection.

The experience of the author has been that of all means of treating erysipelas, that by means of diphtheria serum gives by far the most certain results. For the purpose of comparison, serum was injected in puerperal infection, mastitis, osteomyelitis, phlegmon, and furunculosis, conditions supposed to be due to streptococcus infection, but without any appreciable good results.—*Therapeutic Gazette*.

TOPICS OF PUBLIC INTEREST

Dust Deals in Death

**Consumption Spreads in Dusty Trades. Government Making Study—
Open Windows, Ventilation, and Cleanliness the Cure.**

A WARNING against the dangers of dust was issued in a statement made today by the National Association for the Study and Prevention of Tuberculosis, in which it is shown that the percentage of deaths caused by tuberculosis in dusty trades is more than double that for all employed men in the registration area of the United States.

As a result of the dangers from consumption to those exposed to various forms of dust, and at the request of the National Association, the United States Government has recently appointed a commission to work in coöperation with state authorities in making an investigation into the conditions of the metal mining industries in the United States, with special reference to diseases of the lungs. The work of the commission engaged in this special task will follow lines somewhat similar to those worked out by the Royal Commission of Australia, whose report was recently received in this country.

"Dusts are of three kinds," says the National Association; "factory, street, and house dusts." The statement refers to the results obtained through investigations made for the Bureau of Labor, by Frederick L. Hoffman. While among males generally in the registration area of the United States 14.5 per cent. of all

deaths are from consumption, the mortality among grinders from this disease is 49.2 per cent., and in hardly any of the dusty trades is it below 25 per cent. The percentage of deaths from tuberculosis among all those exposed to metallic dust is 36.9 per cent.; to mineral dust, 28.6 per cent.; to vegetable fibre dust, 28.8 per cent.; to mixed animal and other forms of dust, 32.1 per cent.; to street dust, 25.5 per cent.; and to organic, or dust coming from the articles being manufactured, 23 per cent.

The statement speaks also of the dangers from house dust, especially in rooms that are not well ventilated. The Association warns against dry sweeping, and against the use of the feather duster, or other devices that scatter, but do not take up the dust.

Since the ordinary dust blown about in the streets is impregnated with disease germs, the National Association urges the adoption of methods that will prevent the further dissemination of such bacilli. It also urges for the coming months of fall and winter, more open windows and more fresh air in house, shop, and schoolroom.

Insane Hospitals Lack Tuberculosis Accommodations

Deaths from Consumption Double Ordinary Rate—Only One-Third Provide for Diseased.

OUT of more than 225 public hospitals for the insane, with a population of fully 150,000, only 70, or less than one-third of them, make any provision for their tuberculous inmates, and this too, when the percentage of deaths from this disease is very high. This is the substance of a statement made by the National Association for Study and Prevention of Tuberculosis.

Seventy hospitals in twenty-eight states, providing all told about 3,350 beds for tuberculous insane patients, sums up the provision made for this class of sufferers.

"When it is considered," the National Association says, "that the percentage of deaths from tuberculosis among the insane is from 50 to 200 per cent. higher than among the general population, according to the institution, the need for special provision is apparent." Autopsies made in New York State Hospitals and elsewhere show that tuberculosis is an active disease in about 20 per cent. of the cases, as compared with about one-half that percentage in a normal population. Superintendents of various hospitals in all parts of the United States testify that among the insane in institutions, tuberculosis is manifest in from 20 to 38 cases in every thousand. In the country as a whole about 10 to 15 people per 1,000 are afflicted with the disease.

Because of the habits of the insane, and the difficulty in teaching many of them the rules of cleanliness, the National Association says that separate buildings for the tuberculous should be provided in every hospital for the insane where tuberculosis is at all prevalent. In many cases, where insane persons through outdoor sanatorium life have been cured of tuberculosis, their minds have also been helped, and some have been discharged as mentally sound, who would otherwise have died, both insane and tuberculous.

A NEW TYPE OF AMBULANCE.—The Ernest Wende Hospital for Contagious Diseases is installing two automobile ambulances. It is altogether likely that they will inaugurate a general advance in prophylaxis. The exterior of the ambulance is merely a shell to contain the receptacle for the patient. This consists of aluminum and is very light, and for further convenience in handling, is mounted on roller-bearing wheels. Five such receptacles are provided, one for each of the common contagious diseases, and one for miscellaneous use. These receptacles are kept in a steel sterilising chamber, of as many compartments, except when actually needed.

This ingenious invention for minimising the risk of spreading infection during the transportation of patients originates with Dr. Walter S. Goodale, the Superintendent. Buffalo may well be proud of the innovation, especially as Dr. Goodale is too modest to show such a weakness.

THE TREATMENT OF PULMONARY TUBERCULOSIS BASED ON THE ASSUMPTION THAT THE DIETETIC CAUSE OF THE DISEASE IS LIME STARVATION.—John F. Russell, New York, presents the results of the dispensary treatment of working people at work. Patients to be admitted must have uncomplicated pulmonary tuberculosis, with a temperature below 100° in the evenings. No patients are received who have ulcerative laryngeal tuberculosis, or whose sputum does not show tubercle bacilli. These germs are considered to have disappeared if after six examinations none is found. A table is given showing the results of treatment in twenty patients, most of whom now show no physical signs. Of twenty-one other cases no report is made. Fifty-five per cent. of the cases are cured. This is a larger percentage than in most sanatoria. The highest percentage of cases reported cured in a sanatorium is 34. It is far better to spend money in curing wage earners while at their work than to establish sanatoria for the incurable.—*Medical Record*, July 1, 1911.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

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The Loss to the Profession in the death of Dr. Alvin A. Hubbell

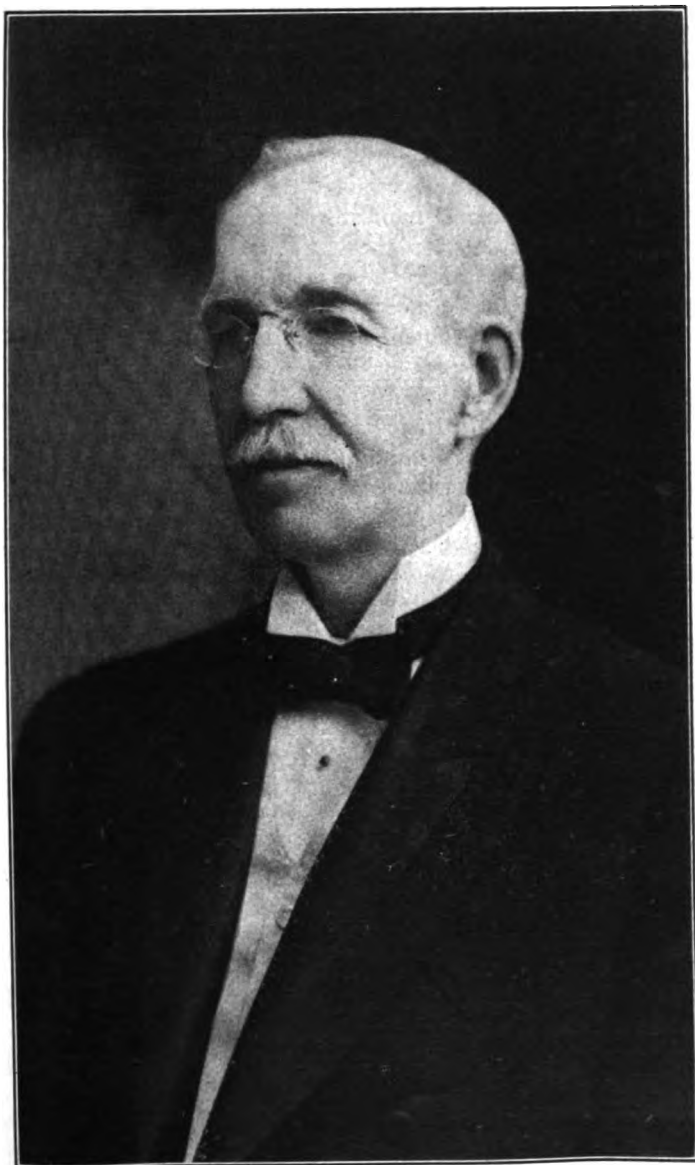
IT has always been customary for the JOURNAL to publish obituary notices or sketches of the lives of medical men who have practised in Buffalo or in western New York; but only occasionally is a professional career so conspicuous in its success as to call for editorial comment. Such, however, was the case with Dr. Alvin A. Hubbell, who died at the Lenox Hotel on the 10th of August, 1911.

The daily papers at the time gave the leading facts concerning his life, and to detail them again would be useless repetition suited rather for the general public. It is proper to add, however, that for a number of years Dr. Hubbell was Associate Editor of the BUFFALO MEDICAL JOURNAL, and that particularly in his chosen field of specialism he added greatly to the interest and success of the magazine.

But when a practitioner has achieved a position of real eminence among us and then laid down his work, it is instructive to glance at the characteristics which made him what he was, and fitting also to pay some tribute of respect to his memory. Especially edifying is it to see how the simple, sturdy and homely virtues tell for success in medicine as in every other walk of life.

For Dr. Hubbell came from a race of pioneers, and almost alone he blazed his own path from a farm in the backwoods to a position of professional eminence which most of us might well envy.

Perhaps the foremost element in his character was an insatiable thirst for knowledge. Sixty-five years ago when he began life near the town of Conewango, Cattaragus County, the prospects for liberal education were small. But he outgrew the narrow confines, as an oak springs from the acorn. The district school, the local academy in Randolph, then more study, the illuminating example of a neighboring physician—all prepared him for courses at the University of Pennsylvania, and later at Buffalo, where he took his final degree in 1876.



DR. ALVIN A. HUBBELL.

To some men, a diploma means the end of study. To him it was the beginning. When he settled first in the hamlet of Leon, near his home, he only changed the extensive observations of the university for others more intensive on the patients who came to him. In 1880 he came to Buffalo. Here, his ability and professional acumen were soon recognised. As his practice grew he studied the harder, and soon became a man of mark among ophthalmologists.

Another characteristic was his thorough appreciation of the fact that as the medical man absorbs knowledge, it becomes his duty to hand that on to others. This he did as a writer and teacher. It is unnecessary here to make a catalogue of his numerous articles. Most were short and practical, some more elaborate. His improvement of the smaller eye magnet, his articles on injuries of the eye in de Schweinitz and Randall and his *History of the Earlier Years of Ophthalmology in America*, all attracted more than ordinary attention.

Early in his career he developed rather unusual executive ability. He was one of those to organise the medical department of the Niagara University, one of the first surgeons of the Charity Eye, Ear, Nose and Throat Hospital and for many years the ophthalmologist of the hospital of the Sisters of Charity.

With such an untiring zeal in the study of his profession, and with such efficient results it is not strange that his merits were recognised by the profession.

He was elected in turn President of the County Society, of the State Association, of the Section of Ophthalmology of the American Medical Association. He was made a member of the American Ophthalmological Society, and was given an honorary degree of Doctor of Philosophy by Niagara University.

His domestic relations were unusually happy. In rather early life he married Miss Evangeline Fancher, a sister of former Senator Fancher. They had one daughter Bula, who is now the wife of Professor Everett Ward Olmsted of Cornell.

Dr. Hubbell's religious convictions were strong, and of a decided liberal trend. He was for several years one of the trustees of the Unitarian Church, and at the time of his death was a trustee of the social settlement known as the "Neighborhood House." He was impatient with cant and hypocrisy, and to quote a well known writer "he stands before his maker as an honest man, with no mask upon his face, and no shackles of his conscience."

His ethical ideals were high. In proof of that, it is not out of place to state that the writer of this notice has been for over thirty years his most constant and most prominent rival for

professional honors, and now at the end of the race, joins the host of his former colleagues with deepest regret in these few words of final and affectionate farewell.

The Control-Experiment and the Enthusiasts

WE called the attention of our readers in our last issue to the fact that the opening of the new year would be the occasion of the demonstration to all concerned of a larger life, of a more vigorous, virile and up-to-date activity on the part of the journal, and to promote this end their coöperation was earnestly solicited.

We also think our new year not an unsuitable time for a brief survey of some of the more interesting and potential events of recent years—therefore our subject, The Control-Experiment and the Enthusiasts.

Students of the history of medicine are constantly and continuously confronted with the evidence that progress in medicine, like progress in science in general, owes an enormous obligation to the men who differed chiefly from their fellows in their larger enthusiasm. Some of these men had more knowledge—all had more enthusiasm. We believe that the rapid progress of the last thirty years, since Koch introduced the control-experiment expressed in his law of pathogenesis as compared with the progress of the century or even the centuries previous, is in great part due to the fact not that the earlier times were wanting in earnest enthusiastic workers and investigators, but that the results of their observations were too frequently misleading from the fact that the accepted proofs of those results had not been scrutinised and tested by the accurate control-experiments now in constant use over the whole world of medicine.

To recall the slow growth of the knowledge as to the cause of disease and with greater particularity of the knowledge of the role of the pathogenic germs in causing disease will make our meaning clear. Marcus Antonius Plenciz (1762) gave a clear statement of his belief in the germ theory of disease. Spallanzani, (1769) ; Schulze, (1836) ; Schwann, (1839) and Henle, (1840-1858), contributed most important observations towards establishing the facts included in the theory, which facts by the way had been demonstrated by Bassi, (1837) ; in the case of the fatal malady of the silk worm—Pèbrine.

However, neither the work of these illustrious men nor that of their even more distinguished successors of the next decade, Döbner, Pollender, Rindfleisch, Billroth, Lister and Pasteur, was so potential in ultimate results, so transforming in many directions as the work of Koch (1881).

Koch taught the world how to demonstrate the facts of the pathogenesis of the germ diseases as propounded by Plenciz more than a century and a quarter before, and progress in this important field of medicine waited all that long interval for the guide, the compass—the control-experiment.

How essential and all important in research is a right method we may possibly get a notion by a moment's survey of a couple of instances in which earnestness, sincerity and lofty purpose were present in a marked degree, where observations were made and results proclaimed in all sincerity of faith and conviction and yet in which future demonstrations proved or will prove that the observations and the results were unreliable, misleading for want of accurate scrutiny and definite testing by suitable control experiments. We refer to the modern systems of medicine—Homeopathy and Quimby-Eddyism.

The founder of homeopathy, an honest and well equipped member of the medical profession, announced about 1810 his so thought discovery as to the nature and cause of disease and as to the way in which medicines were curative. As proclaimed by him the cause of disease was never material but always immaterial, dynamic, spiritual; and medicines were curative in direct proportion as they were diluted, attenuated, raised in potency as they were reduced in weight.

We believe it may be said in historic accuracy and fairness that this system of medicine was largely speculative in its conception and promotion; that it rose and flourished with distinct disregard to the now well known scientific principle that discoveries must be thoroughly tested by control-experiments before they are accepted by students of the subject.

However the years passed, men grew, instruments of precision came, students inquired of nature and were taught by it, the belief that certain diseases were caused by certain micro-organisms ceased to be a belief because it became a demonstrated fact of scientific knowledge.

Every discovery of a pathogenic germ in plants, in animals or in man—and there are hundreds of such—was a demonstration of the material nature of the cause of disease in direct opposition to the faith of homeopathy.

The control-experiment has done its work in this particular direction so far as the cause of disease is concerned, and is rapidly doing its work in like manner in therapeutics.

The rise of the system of medicine, Quimby-Eddyism, presents many features quite analogous to those of homeopathy, at least there is in both a generous enthusiasm, a complete reliance upon the supposition that with good motives, good intentions, good pur-

poses, methods will, of course, be all that may be desired. The former taught that the cause of diseases was not material, but spiritual; the latter teaches that there is no such thing as pain or disease, but that those who are in error think there is, and so thinking make a mistake. Homeopathy taught that disease was best cured by highly attenuated, spiritualised remedies. Quimby-Eddyism teaches that the mind, our most spiritual part, is the only cause and the only cure of disease.

It would seem that as the control-experiment gradually but persistently invaded the realm of speculation in homeopathy transforming the enthusiasm of belief into the reality of knowledge so we may reasonably expect the same system some day to enter the realm of Quimby-Eddyism with the demonstrations of the reality of matter, of air and water, of bread and meat, of thirst and hunger, of pain and of disease; even possibly the proof of demonstration that prevention of disease may be more satisfactory than its cure, and that in the question of curing disease, some treatments are better than others. We believe the control-experiment bears an important message for the enthusiast.

A Question of Criminal Intent

At the present time there are four physicians of this city under criminal charges before the City court of Buffalo as a result of the activities of the Erie County Medical Society. The charges against these practitioners are definite and evidence, carefully prepared, is being presented against one of them to prove that he is guilty of the crime of attempting abortion.

The physicians under arrest are Monroe Manges, Martin Willoughby, Arthur Collins and Frederick Vogt. Dr. Manges is being examined in the city court and is being defended by an able attorney who is using every technicality in the intricacies of the law to free his client of blame. The complainant in all the cases is a woman detective employed by the Erie County Medical Society to gather evidence against suspects and from the testimony thus far presented her plan of procedure has been carried out and apparently she has secured sufficient evidence on which the police acted without hesitation. The woman detective was assisted by a male companion.

There is a co-defendant of Manges, a woman who kept a rooming house on Franklin street where the detective took an apartment and arranged for her aborting. Dr. Manges, it is testified, came to the house in response to a call from the woman who kept the house—he had a patient in the house at the time—in the morning and without seeing the detective stated that he

would return in the afternoon and make an examination. He did call later with instruments and he was paid \$10 according to previous agreement, \$15 of which was given to the rooming house-keeper. He then prepared for the "examination" of the patient, and was about to begin the examination when detectives came from an adjoining room and arrested him. A physician was called in for the purpose of examining the instruments displayed and his evidence will be introduced to show that they were not wholly those used for making an examination. The cases of Drs. Collins, Vogt and Willoughby have been presented, the prisoners arraigned and admitted to bail. Their examinations will be held later when it is determined regarding the points raised by Manges' attorney who contends that because the detective admittedly was not pregnant it were impossible for the physician to be guilty of the crime of attempted abortion; that one might as well be charged with "killing a corpse." To this the district attorney answers that a pickpocket could not be considered guiltless of attempt to pick a pocket because the pocket happened to be empty. These be tangled questions of law trimmed of technicality with which the courts alone have to deal; yet they are interesting and call for definite decision. In the present case they will be unquestionably cleared up before the ending of the case for it is the expressed intention of Manges' attorney to carry his case to the Court of Appeals if necessary. And it is quite likely the other cases will be permitted to rest until it is decided whether an abortion may be attempted in the absence of a pregnancy. The law considers intent in criminal cases and it may be that these Buffalo cases will be the means of establishing a precedent in abortion trials. Certainly the matter should be cleared up with a finality that would make unnecessary the juggling which accompanies the trial of so important a phase of criminal practice.

Heretofore the difficulty in obtaining convictions in such cases has been the lack of corroborative evidence on the part of the woman who has been aborted either through her disappearance or her disinclination to face a jury and tell the story of her moral delinquency. With a clear interpretation of the intent in such cases the hucksters of the profession will find it difficult to peddle their wares.

The Erie County Medical society is following the trail blazed by the New York County society apparently fearlessly and let us hope, successfully. There be none of vengeance in these cases. The prosecution is merely complaining and presenting evidence to sustain its contention that the men under arrest agreed to perform an operation forbidden by the law of this state; and

broadly considered, the law holds that a person agreeing and consenting to commit a felony is guilty of the commission of a crime even though the specific act be not committed. There is no sentimental phase of this question at all viewed through legal eyes or professional eyes. If the men under arrest are guilty they should be punished. If the law says they are innocent they should be reinstated to their professional standing. At the same time it is the duty of the prosecution to determine the question of intent in these cases and so have an end to legal quibbling and Scotch verdicts.

N. W. W.

The Splitting of Fees

WHEN the Erie County Medical Society made public its report on the fee-splitting evil and the profession generally signed an agreement not to divide fees it made a pioneer move toward eradicating an evil of commercial medicine which was gratifying. At the same time, in making public in the daily press the findings of its committee and the wording of the report which lacked in spots that dignity of phraseology which is supposed to be the twin of science, it gave opportunity for jaundiced journalism to splash about in a sea of unrestricted words and hold the profession up to ridicule. That prophecy was made at the time the Buffalo newspapers were moralising on the decadence and commercialism of the profession which was so ulcerated of financial greed as to afflict its patients with unnecessary expense and decided hardship and make them the helpless victims of a high-grade form of graft. The prophecy made then has been fulfilled.

One of the cheaper magazines in its current issue has an article, lurid, reckless and ghastly in its yellowness, dealing with the question of fee splitting and the text of the article is the report of the Erie County Medical Society from which extracts are given which, in the absence of the portions preceding and following, are distinctly untempered. This is in no sense a complaint regarding the work of the society or its committee; it is merely a note of regret that any portion of the report should have been so worded that a cheap magazine might find fertile soil for the activities of its muckraking brigade. N. W. W.

Quality, Not Quantity, In Medical Education

AT the spring meeting of the Medical Society of the County of Erie, the Medical Department of the University of Buffalo initiated a movement, involving serial action by the State Society, the Regents and the Legislature, looking toward the

requirement of a year in college, preparatory to the medical course. For a college, practically unendowed and limited by natural competitive factors to a comparatively small potential clientele, such an action betokens a high degree of moral courage and of self sacrifice.

Such action, however, is in line with the elevation of medical educational standards. In 1904, the number of medical schools had reached the maximum of 166. It is now 120 and must inevitably fall to 100 within a very few years. Forty-one schools already require at least one year of collegiate study and six more definitely announce such a requirement next year.

Those who have grown up with the idea that culture in America hugs the Atlantic shore and that the west is "wooly" will experience many shocks in studying educational statistics in general. There is, on the whole, less illiteracy and a greater proportion of high school graduates in the middle, northern states, than in any other part of the country. So far as standards for medical matriculants are concerned, the east can boast only of the commencement of the campaign by Johns Hopkins in 1893, and the falling into line of Harvard in 1900. Thereafter, most of the glory attaches to western standards (no pun intended) and the tardy enlistment of some of the oldest and strongest eastern schools suggests the draft rather than volunteering.

Many will be surprised to know that five states require two years of collegiate study for medical licensure and four more, one year. The initiative taken by the University of Buffalo indicates that the Empire State is not in this number. Nor can even Massachusetts claim the honor. In fact, only one eastern state is included—Connecticut, one year, beginning with the medical class of 1914. North Dakota and Iowa led the movement, with a two-year requirement, affecting the present graduating class, at its matriculation four years ago. Eastern culture must follow these states, South Dakota, Minnesota, Colorado, Kansas, Indiana and Utah.

For the country at large, just about one medical graduate in six, in the present year's classes, held a baccalaureate degree. The proportion does not by any means correspond to the state requirement of a partial collegiate course and reaches its maximum, over 50 per cent., in Massachusetts on account of the high requirement of Harvard and the relative lack of competing, low grade colleges, which counteract the tendency of Johns Hopkins in Maryland.

The salutary effects of greater stringency in medical standards include an economic feature of the utmost importance. In 1904, the number of medical graduates reached its maximum.

5,747 and there was good reason to fear that the medical profession would not only suffer but become demoralised by the excess of supply over demand. The total has now fallen to 4,273, less than in 1890 and can not fail to fall still lower within the next few years, however great the matriculation may be. The ancient blessing upon the man who made two blades of grass grow where one grew before, should be doubled upon those who are working to produce exactly the reverse condition for the medical profession. A little more concerted action, producing the same steady diminution of medical students that has occurred since 1904, and we shall reach the point where there will be a vacancy by death, in our ranks, for every new recruit, and an average clinetele increasing by a couple of families a year by the growth of the aggregate population. Even this will not compensate for the decreasing incidence of disease. Let the profession strike while the iron is hot and hasten the time of economic equilibrium.

All of which is written with due acknowledgement to the educational number of the *Journal of the American Medical Association* of August 19, 1911. The annual statistics compiled in these reports represent an enormous amount of work, they are by no means dry reading and the obvious morals illustrate the advantages of a strong professional organisation. One who has followed these reports from year to year can note an almost mathematic correspondence between statistics and practical results. The finger of fate points clearly toward many schools in the present list as doomed to close a worse than useless struggle.

The Policy of the Buffalo Medical Journal

THE change in the editorial management of the BUFFALO MEDICAL JOURNAL naturally raises the question among its readers, as to its future policy. Few periodicals of any kind have had so long an existence nor under such able management and, whatever the aspirations and the enthusiasm of a new incumbent may be, any attempt at radical change would indicate merely a failure to appreciate the worth of illustrious and lamented predecessors. A consistent and persistent effort will, however, be made to secure progressive improvement in details, increase in material contents and extension of territory.

It may be permissible to state that the acceptance of the responsibility of the JOURNAL by the present editor does not imply either the resignation of active practice nor the assumption of unfamiliar duties since he has had a quarter of a century's experience embracing nearly every detail of journalistic and editorial work of a medical nature.

The sole ultimate end of medical study is to prevent and cure disease. This end can be reached only by a thorough understanding both practical and scientific, of the nature of disease and of the means employed against it. The best type of physician is the one more interested in practising medicine than in running a medical society, formulating ethical principles or merely scientifically curious about the normal and abnormal phases of the animal, especially the human organism. Hence, the main function of a medical journal, unless of highly specialised nature, should be the discussion of practical problems in diagnosis, and methods of treatment, but with an intelligent basis of science which enables a broad grasp of principles. We ask, therefore, for original articles bearing as directly as possible on the actual work of the physician, avoiding superficiality on the one hand, abstruseness on the other. So far as is practicable, articles on related subjects will be grouped together, varying the topics discussed from issue to issue so as to cover the field of medicine and surgery generally. No fear need be entertained that the JOURNAL will be unduly devoted to gastro-enterology in the future any more than it has been devoted to obstetrics and gynecology in the past.

The BUFFALO MEDICAL JOURNAL owes its existence to the natural demand for an organ that shall be essentially local, though in no narrow sense either geographically or otherwise. This fact implies that the JOURNAL should report the medical news of the region—not of Buffalo alone but of adjacent cities and the intervening country. Every reader should feel that any change in his residence, office hours, and the like, and every important event in his professional life are worth recording. We wish to announce in advance and to report in retrospect though necessarily briefly, the transactions of the various medical organisations of this region as well as of meetings and enterprises in which the profession is interested. Obituary notices also belong within this department and will have an increasing value historically as time passes. With no lack of respect for the dead, such notices must be brief, in consideration of the pressing needs of the living.

The editorial department should, except by reviews and compilations, avoid the presentation of problems of medical practice appropriate to the department of original communications, just as much as the latter should avoid the lengthy discussion of matters of ethics and policy. We do not believe that there is, at present, any issue confronting the profession as a whole, which involves a decision between right and wrong or whose determination, one way or the other, would seriously jeopardise the interests of the profession. As heretofore, the BUFFALO MEDICAL

JOURNAL will be independent in its editorial pages but as free as possible from personal views and interests. As to personal prejudice, in the narrow sense, we are glad to say that there is no person and no organisation within our scope for whom or which we have any but the kindest regard. It is perhaps, unnecessary to make this statement but we do so because the term *independence* is often used to imply a pile of stones ready to throw at every passer-by.

It is only fair that the readers of the JOURNAL should be equally free to express individual opinions on matters of professional policy and polity and, subject only to necessary limitations of space and the ordinary amenities of debate, our columns will always be open to correspondence on any topic of interest to the profession.

We ask the continuance of the cordial support which the profession has always accorded to the BUFFALO MEDICAL JOURNAL.

Date of Issue

OWING to the delay in issuing the August number, prior to the present management, and due to inevitable causes, it has been thought best to equalize the intervals by postponing the publication of the September issue about a week. Hereafter, the JOURNAL will be mailed within the first five days of each month. It seems best to allow some leeway, on account of the occasional advantage in securing an important paper or news item; also, confidentially, because even special practice frequently involves periods of overwork, loss of sleep and out-of-town trips so that, if we laid down an iron clad rule that the JOURNAL must be in the mail of a certain day, it would be necessary to close the forms a week or two earlier than otherwise, in order to run no risk of emergent professional duties.

Papers Expected

In the next issue, will be begun a series of articles giving in classified form, a list of new drugs accepted by the Council of Pharmacy of the A. M. A.

At about the time this notice appears, several of our old-country friends will be laughing over our attempt to write their languages. We expect, in reply, a number of short original papers which will be translated for exclusive publication in the BUFFALO MEDICAL JOURNAL, and of whose value there can be no doubt.

The rapid increase of state and municipal legislation requiring reports of contagious disease, and the like, places a considerable burden on the medical profession which they are willing

to bear but which, through ignorance of the law, they sometimes fail to assume. We are promised a concise statement, by an authority, of the duty of physicians in this regard. This article will relieve the conscientious physician of worry and trouble in ascertaining what is required of him.

A Trespass

SOME of our readers may have seen the play entitled "Too Much Johnson," and may be inclined to paraphrase it with regard to the trespass of the editor upon the original department of this issue. "We," in pursuance with an agreement made by our predecessor, with the Medical Association of Central New York, are obliged to publish "my" article but otherwise expect to confine our material to the proper department.

Acknowledgement

OUR thanks are due to the *News* for the loan of the picture of the late Dr. Phelps.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organisation in western New York, at cost with allowance for additional subscriptions. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

Subscribers are requested to remit promptly for the fiscal year beginning with August 1911. This request is due in part to the fact that the publication of the JOURNAL involves the payment of cash; in part to the simplicity and small amount of time required to register a cash subscription, as compared to the greater trouble of an open account; largely to the stringency of the postal laws with regard to bona fide subscriptions, on which depends the allowance of mailable sample copies. The greater the number of paid subscriptions, the more we can extend the circulation and, thus, improve the quality of the JOURNAL.

Non-subscribers receiving the JOURNAL, are requested to become subscribers. While we would prefer draft or money order, stamps or check (\$2.00) will be accepted.

A LAW affecting physicians of New York State became of force on September 1. It requires reports to the State Commissioner of labor of all cases of industrial poisoning under treatment. The sections defining the duties of the physician and the penalty for non-observance are as follows:

Every medical practitioner attending on or called in to visit

a patient whom he believes to be suffering from poisoning from lead, phosphorus, arsenic or mercury or their compounds, or from anthrax, or from compressed air illness, contracted as the result of the nature of the patient's employment, shall send to the commissioner of labor a notice stating the name and full postal address and place of employment of the patient and the disease from which, in the opinion of the medical practitioner, the patient is suffering, with such other and further information as may be required by the said commissioner.

If any medical practitioner, when required by this section to send a notice, fails forthwith to send the same, he shall be liable to a fine not exceeding ten dollars.

It shall be the duty of the commissioner of labor to enforce the provisions of this section, and he may call upon the state and local boards of health for assistance.

This act shall take effect September first, nineteen hundred and eleven.

HEALTH COMMISSIONER FRONCZAK, of Buffalo, has decreed that the public drinking cup, towel and combs and hair brushes must go. He advises the use of special paper towels, card board combs and paper cups for all public places. The old hanging hair brush is unequivocally condemned.

THE Equitable Life Assurance Society of New York has established a conservation department.

Through that department and the medical department, the society will undertake to assist, by educational and perhaps other methods, in the conservation of human life.

The society will reach members and its medical representatives by means of an official publication dealing with this and other important subjects.

The society will extend such help as it legally may to the public authorities of the country in their efforts to improve the public health, and it will give its moral support (financial contributions cannot be made) to the general health conservation movement which has, in its various phases, reached nation-wide proportions, and accomplished most gratifying results in reducing life-waste.

PERSONAL

DR. CHARLES W. BETHUNE of Buffalo has removed his office from 262 Niagara Street, to the Professional Building, 131 Allen Street. Hours 1 to 3 and 6 to 8. Sundays, 2 to 5. Telephone, Tupper, 1251-W.

DR. J. E. WALKER, of the Steuben Sanitarium at Hornell, N. Y., has returned from his vacation and taken up his position again as superintendent much to the pleasure of the guests and everyone connected with the institution.

DR. BENJAMIN H. GROVE announces that he has occupied his new suite of offices at 344 Pearl St. Hours 9 a. m. to 12.30 P. M. Both 'phones.

DR. FRANK A. LOVE spent part of August on Georgian Bay.

DR. DEWITT H. SHERMAN has recently returned from Newport.

DR. JOSEPH T. COOK has returned from the Adirondacks.

DR. RICHARD H. SATTERLEE had an unusual experience at the recent burning of the Hotel Frontenac. After the fire, he went to South Butler and has just returned to Buffalo.

DR. H. W. WILEY took a few day's rest at Niagara Falls, late in August.

DR. IDA C. BENDER has returned from her summer home in Massachusetts.

DR. MAUD J. FRYE of Buffalo, sailed in July for a three months' stay in Europe.

DR. AND MRS. G. A. HIMMELSBACH of Buffalo, sailed early in August for Europe.

DR. JULIUS RICHTER of Buffalo, is spending a month at the Mayo Clinics in Rochester, Minn.

DR. CHARLES A. BENTZ is in Europe for three months' study.

DR. FRANCIS M. O'GORMAN of Jefferson street, returned from a two-weeks trip up the lakes late in August.

HEALTH COMMISSIONER FRONCZAK has received an invitation to address the International Municipal Congress and Exposition in Chicago during its session, September 18th to 30th, on the subjects of milk supply, school inspection and garbage disposal.

OBITUARY

WILLIAM CORNELIUS PHELPS, M.D., was born at Vernal Corners, N. Y., August 31, 1844, of Israel Root Phelps and Eliza Van-Allen Phelps. He died at 146 Allen St., Buffalo, August 27,



WILLIAM CORNELIUS PHELPS

1911, after nearly a year's illness dating from a fall by which his patella was fractured.

Dr. Phelps, after graduating from Middlebury Academy, registered for the study of medicine with the late Dr. John D. Hill of Buffalo, and received the degree of M.D. from the University of Buffalo in 1866.

He held the following positions of honor and professional activity: Surgeon of 74th Regiment, Police Surgeon, in the early '70's; twice Health Physician of Buffalo, the second time for the years 1882 and 1883; until two years ago, Demonstrator of Anatomy, University of Buffalo; Surgeon, Buffalo General and Erie County Hospitals; President of Staff of the latter.

Dr. Phelps practised medicine for forty-five years in Buffalo, being of the best type of the general practitioner and surgeon. He was a modest, kindly, substantial gentleman, conservative in his methods, advanced in his knowledge, never advancing his attainments for selfish ends. Many of the old boys who dissected under his guidance will join us in a tribute to his ability as a teacher and his worth as a friend.

DR. GEORGE W. SAYLES died on August 6 at his home, 211 Amherst Street, Buffalo, after an illness of several months.

Dr. Sayles was born in Branchton, Ont., and received his early education in his home town. He later studied pharmacy at Toronto. He came to Buffalo 32 years ago and opened a drug store at Amherst street and Military road. In 1890 he entered the medical department of the University of Buffalo being graduated in 1893.

The same year, while an interne at the General Hospital, he married Miss Etta T. Twaits, a nurse on the hospital staff.

Besides Mrs. Sayles and his daughter, Vera M. Sayles, Dr. Sayles is survived by his father, Peter F. Sayles and two brothers, James G. and William C. Sayles, all of this city. The funeral was held from the family home. Burial was at Forest Lawn.

DR. CHARLES O. GREEN, died at his home in Hornell, N. Y., on August 3, as the result of injuries received in an automobile accident. Dr. Green was alighting from a street car when he was struck by the automobile. He was 51 years old. He had served nearly 20 years as a medical officer in the state militia. At the time of his death he was Captain of the Third Regiment. Dr. Green was health officer of Hornell for many years.

DR. J. A. LEWIS died on August 3 at his home in Lockport, N. Y., after a long illness. Dr. Lewis began practice in Lockport five years ago after many years residence in West Seneca. Dr. Lewis was Health Commissioner of Lockport for one term and at the time of his death was President of the Lockport Tuberculosis Society. He was 70 years of age.

DR. IRA DWIGHT RICHARDS of Bergen, died August 27 after less than a week's illness. He was 82 years old and besides his wife is survived by three brothers and one sister. Dr. Richards was a pioneer in this section and was a veteran of the Civil war. Funeral on Wednesday afternoon at 2.30 o'clock.

DR. OLIVER H. BABCOCK, a graduate of the University of Buffalo, of the class of 1861, after practising in Hammondsport, N. Y. for nearly fifty years, died July 29, 1911, aged 77.

DR. FRANK P. FOSTER, editor of the *New York Medical Journal* since January 1, 1880, died at Chadwick, N. J., August 13, 1911. He was born at Concord, N. H., November 26, 1841, of old Yankee stock. Educated in the public schools and under the preceptorship of Dr. Lyman Gage, he graduated in medicine

from the College of Physicians and Surgeons in 1862. After preliminary practice as interne at the New York Hospital, as ship surgeon on the Pacific, and as contract surgeon in the United States Army during the last years of the Civil War, he engaged in practice in New York City in 1865, at first as a general practitioner, then as a dermatologist but eventually as an obstetrician and gynecologist. He was noted in various ways. Perhaps his most practical service was in introducing the manufacture of bovine vaccine into America in 1860. An author of high literary merit, his greatest service in medical writing, was, after all, his able editorial management of the *New York Medical Journal*. His own journal contains in the issue of August 26, 1911, one of his latest papers, "Forty-six Years of Medicine in New York." It would have been appropriate that this article should be of the nature of an autobiography, as its name suggests. It is characteristic of the man, however, that the author scarcely speaks of himself but gives an interesting review of certain phases of medical history of the city and the state.

We do not remember ever to have met Dr. Foster personally but frequently heard from him in regard to original and occasional editorial contributions to the *New York Medical Journal* and even in the brief correspondence, he injected so much of the spirit of friendship and personal interest, that his death comes to us as a personal loss. Few men have done so much as Dr. Foster in influencing and advising the medical profession for good.

SOCIETY MEETINGS

THE American Association of Clinical Research will hold its third annual meeting on September 27th and 28th at Boston.

THE American Medical Editors' Association at the annual meeting in June elected the following officers for 1911-1912.

President, Surgeon-General Walter Wyman, Washington, D. C.; first vice-president, Thomas L. Stedman, M.D.; *Medical Record*, New York; second vice-president, Walter Lindley, M.D., *Southern California Practitioner*, Los Angeles; secretary and treasurer, Joseph MacDonald, Jr., M.D., *American Journal of Surgery*, New York.

Executive Committee: W. C. Abbott, M.D., Chicago, Ill., *American Journal of Clinical Medicine*; C. L. Stevens, M.D., Athens, Pa., *Pennsylvania State Medical Journal*; G. H. Kreidler, M.D., Cincinnati, Ohio, *Lancet and Clinic*.

THE American Medical Association has appointed the following committee to draft a bill for presentation to the next congress, providing for the establishment of a national health department

Dr. Herman M. Biggs of New York city, Dr. W. A. Evans of Chicago, Dr. S. G. Dixon of Pennsylvania, Dr. J. N. Hutty of Indianapolis, Dr. J. N. McCormack of Kentucky, Dr. H. P. Wolcott of Cambridge, Mass., and Dr. W. C. Woodward of the District of Columbia. This committee will appoint a subcommittee to act in every state in the Union.

BOOKS AND AUTHORS

Practical Cystoscopy and the Diagnosis of Surgical Diseases of the Kidneys and Urinary Bladder. By Paul M. Pilcher, M. D., Consulting Surgeon to the Eastern Long Island Hospital. Octavo of 398 pages, with 233 illustrations, 29 in colors. Philadelphia and London: W. B. Saunders Company. 1911. (Cloth, \$5.50 net.)

If one were to pick and choose from the relatively large number of books on genitourinary subjects there could be no mistake in selecting this as the most valuable contribution to the literature of the specialty. It is not alone complete as to construction and description, but it is absolutely flawless in the technic of bladder instrumentation and ureteral catheterisation. Dr. Pilcher has that rare gift of imparting knowledge by printed word and so excellent is his phraseology that it is possible for a careful student of previous casual experience with the cystoscope to do satisfactory work with the instrument by following the rules laid down in this most refreshing work. One of the chief reasons for this is that the teachings contained in the book are based upon the personal experience of the author; and, while he has undoubtedly been influenced by the writings of others nothing has been set down in this cystoscopy that he personally has not seen and tested. He makes grateful acknowledgement of the influence of the men under whom he has studied and of a truth their methods are traceable in Pilcher's work for he has the authority of Nitze and the directness and force of description of Caspar. The architecture of the book is beyond criticism.

Under the general heading, the technic of cystoscopy, types and constructions of American and European instruments and their lighting arrangements are described in detail and the direct and indirect instruments are differentiated. Considerable space is given to the care of the instrument, a necessary section which has been slighted in previous works. There is detailed instructions regarding the preparation of patients, the method of conducting an examination and for observing and orienting the urinary bladder. With this solid foundation the author takes his reader on to the next step, the catheterisation of the ureters

with the various instruments devised for this work. The diagnostic value of ureteral catheterism is given a chapter by itself. Then are taken up, the diseased bladder with its pathologic change, the cystites, tuberculosis, ulcers, tumors and calculi and the various miscellaneous diseases not generally recognised. A section of the book is devoted to diseases of the prostate which lacks only that important and frequent condition resulting from colon infection of the prostatic urethra to make it complete. Future editions of this work will undoubtedly contain this phase of prostatic disease for while it is definitely urethral when it makes itself manifest there are few such cases in which the cystoscopic picture is not of value in a confirmatory sense at least.

The diseases of the ureter are given ample space and to the functional activity of the kidneys is given a separate part of the book. The diseases of the kidney are completely gone into and there is little that anyone however carping and critical could find to disagree with. The book closes with a chapter on the therapeutic uses of the cystoscope which is highly instructive.

There are over 200 illustrations, 29 of them being in color and these deserve especial mention. They are the work of Miss Eleanor Frye who made a special study of cystoscopy for the purpose of carrying out the illustrative portion of the work. It is unnecessary to say that she has been eminently successful in reproducing actual conditions in perfect color scheme. Her color plates are exquisite and add materially to the value of the book.

N. W. W.

Principles of Anatomy and Physiology; John Aitken, M.D., Fellow of the Royal College of Surgeons, and the like. Printed for J. Murray, London, 1786. Price not stated. About 350 pages with numerous plates. Bound in calf.

This interesting work has lately been presented to the editor who will gladly show it to anyone who wishes to examine it. The style is brief but clear. Practical, surgical and medical hints abound. Dislocations and fractures are discussed for the various bones. Under the head of teeth are included some very valuable suggestions as to oral hygiene and the operation of transplanting is mentioned as a "very ornamental piece of surgery." We select a few passages at random; "When a person falls on the neck and is stunned or motionless, these vertebrae (1st and 2d) may be supposed to be disturbed, an idea that justifies gentle extension with a view to relieve the spinal marrow from compression." "A small share of the pericardium touches the sternum. . . . so as to render it practicable to open it through a trepaned hole of this bone without wounding the pleurae. May this be done to discharge dropsy there?" "The facial artery is in the way of the extirpation of the maxillary gland or lymphatic ones connected with it, which are often tainted from the cancerous lip and require

to be removed along with it." Many similar allusions make us realise the comparatively slight advance of surgery, save in regard to anesthesia and asepsis, since this book was published.

The plates are exceedingly clear, so far as we can judge, accurate, and much better executed than those in the anatomy which we studied a hundred years later.

Hospital Management. A Handbook for Hospital Trustees, Superintendents, Training School Principals and Physicians. By **Charlotte A. Aikens**, Author of "Hospital Training-School Methods and the Head Nurse." 12mo of 488 pages, illustrated. Philadelphia and London: W. B. Saunders Company. 1911. (Cloth, \$3.00 net.)

This book of about 500 pages is one of the most valuable contributions to the literature on hospital management which has ever been published. Each of the nineteen chapters is written by a person of long experience in the management of hospitals, and who therefore can speak with authority on the subject treated.

In studying this work one finds every phase of hospital work handled in that broad-minded spirit which must recommend it to all those interested in this line of work, in connection with either large or small institutions.

The volume abounds with plates and drawings, illustrating the text and presenting valuable information regarding methods tending to economy and improved service. The appendix is a very valuable addition to the work, giving as it does a vast number of useful data concerning training school regulations, hospital dietaries and much miscellaneous information.

The book deserves and will repay careful study by all those interested in hospital management.

H. C. R.

Joint Tuberculosis. By **Leonard W. Ely**, M. D., Consulting Orthopedist to the County Hospital; Attending Orthopedist to the Children's Hospital, Denver. 8 mo, pp. 243. Illustrated. New York: William Wood & Co. 1911. (Cloth, \$2.50.)

The book is timely and concisely written. The author, an orthopedic surgeon, has had much to do with joint tuberculosis, and is to be complimented on his success in combining the pathological and practical experience on this important subject. He has not only given his own ideas as to radical methods, but has thoroughly reviewed the literature on this subject, stating frankly the opinions of other authors. The etiology, pathology, symptomatology, diagnosis, prognosis and treatment are fully taken up in the various chapters under these headings. Many original ideas have been advanced. It is not the intention of the book to take up detailed treatment of individual joints, nor to include all of the orthopedic measures necessary to control tubercular joints.

In short, the book is a very excellent treatise on the subject, with valuable references and comparisons throughout.

R. O. M.

Gonorrhea in the Male. A Practical Guide to its Treatment. By **Abr. L. Wohlbarst**, M.D., Consulting Genitourinary Surgeon, Central Islip State Hospital. New York: International Journal of Surgery Co. 1911. (Cloth, \$1.00.).

Wohlbarst believes that much harm is done by the overzealous treatment of acute gonorrhoea in vogue at the present day. He considers the irrigation method to be efficacious but dangerous in unskilled hands. Injections should be administered by the surgeon personally until the acute symptoms have subsided and internal medication is heartily endorsed.

The author claims that under his method of treatment complications except prostatitis are reduced to a minimum. The technique of meatomy is discussed in detail especial stress being laid upon the necessity of dividing the fold of Guérin, when it encroaches upon the urethral lumen.

Some of Wohlbarst's views as to the indications for urethrotomy are at variance with those prevalent among the majority of urologists. This book is especially to be commended for emphasising the fact that the urethra is a sensitive organ and not merely an elastic tube.

C. W. B.

BOOKS RECEIVED

A Manual of Pathology and Morbid Anatomy. By T. Henry Green, M.D., F.R.C.P., Consulting Physician to the Charing-Cross Hospital, etc., London. Revised and enlarged by W. Cecil Bosanquet, M.A., M.D., F.R.C.P., Assistant Physician to the Charing-Cross Hospital, etc., London. Large 12mo, 642 pages, with 250 illustrations. Lea & Febiger, Publishers, Philadelphia and New York, 1911. (Cloth, \$4.50, net.)

One Hundred Surgical Problems. By James G. Mumford, M.D., Visiting Surgeon to the Massachusetts General Hospital; Instructor in Surgery, Harvard Medical School. Octavo, 354 pages. W. M. Leonard, Boston: 1911. (Cloth, \$3.00.)

Manual of the Diseases of the Eye. By Charles H. May, M.D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University. 12mo., 407 pages, with 362 original illustrations. New York: William Wood & Co., 1911. (Cloth, \$2.00.)

The Practical Medicine Series. Ten volumes. Under the general editorial charge of Gustavus P. Head, M.D. Vol. IV, Gynecology. Edited by Emilius C. Dudley, A.M., M.D., and C. von Bachellé, M.S., M.D. Vol. V, Obstetrics. Edited by Joseph B. DeLee, A.M., M.D., and Herbert M. Stowes, M.D. Series, 1911. Chicago: The Year Book Publishers. (Prices, \$1.25; entire series, \$10.00.)

Handbook of Suggestive Therapeutics. By Henry S. Munro, M.D. Third edition, revised and enlarged. 8vo., 409 pages. St. Louis: C. V. Mosby Company. 1911. (Cloth, \$4.00.)

Hieronymus Fracastor's Syphilis, from the Original Latin. A translation in prose of Fracastor's immortal poem. Printed on hand-made imported paper; library binding, crown octavo. The Philmar Company, Medical Publishers, Fidelity Building, St. Louis. (Price, \$2.00.)

A Manual of Materia Medica. By E. Quin Thornton, M.D., Assistant Professor of Materia Medica in the Jefferson Medical College, Philadelphia. Octavo, 525 pages. Lea & Febiger, Philadelphia and New York, 1911. (Cloth, \$3.50, net.)

A Manual of Clinical Diagnosis by Means of Laboratory Methods. By Charles E. Simon, M.D., Professor of Clinical Pathology and Experimental Medicine in the College of Physicians and Surgeons, Baltimore. Seventh edition, enlarged and thoroughly revised. Octavo, 780 pages, with 168 engravings and 25 plates. Lea & Febiger, Philadelphia and New York, 1911. (Cloth, \$5.00 net.)

A Manual of Practical Hygiene. By Charles Harrington, M.D., late Professor of Hygiene in the Medical School of Harvard University. Fourth edition, revised and enlarged by Mark W. Richardson, M.D., Secretary to State Board of Health of Massachusetts. Octavo, 850 pages, with 124 engravings and 12 full-page plates, in colors and monochrome. Lea & Febiger, Philadelphia and New York, 1911. (Cloth, \$4.50 net.)

MISCELLANY

The Medical Journal as an Advertising Medium

MANY business men, otherwise, experienced and shrewd, fail to appreciate the full value of medical journal advertising. There are probably not more than three or four medical journals in the world whose circulation even approximates that of the average, successful, literary magazine. But the limited circulation of the medical journal is sifted. It does not include children, it eliminates the adults who read for amusement, it is confined to responsible, grown men, mostly heads of families, practically all centers of influence and of advice with regard to the dwelling, clothing, lighting, heating, food and other necessities and comforts of life used by the community at large.

While few physicians are rich, the profession, on the average represents the upper 15 per cent. of the population, in the earning scale and, on the average, its necessary expenditures are disproportionately high compared with its earnings. That is to say, the advertiser in a medical journal eliminates the 85 per

cent. of the population which cannot, except by an unwarrantable extravagance, buy any kind of luxury and which cannot buy the higher grades of necessities. Moreover, the average grade of any necessity or moderate luxury, bought by the physician is higher than that bought by the upper 15 per cent. of the population and corresponds to that which about 5 per cent. of the grown men who buy ordinary magazines can afford to purchase.

Another point to be considered is this: There is no reason why the buyer of an ordinary magazine should read the advertisements and the buyers of magazines who are most likely to become buyers of goods, are least likely to have time to read the advertisements. On the other hand, the physician who reads a medical journal at all, simply must give careful consideration to its advertisements of drugs, instruments, laboratories, and the like, if he gets any practical benefit from his subscription. In this respect, the medical journal is like a trade journal, only "more so."

Prize Essay

UNDER the auspices of The American Society for the Study of Alcohol and Other Narcotics.

Dr. L. D. Mason, of Brooklyn, N. Y., Vice-President of the society, offers a prize of \$150.00 for the best essay on the following topic:

"The Biological and Physiological Relations of Alcohol to Life."

The essay must be the result of original research which shall confirm or disprove the present theories of the inherited effects of alcoholic degeneration and indicate how far the defects of parents are transmitted to the children.

Such work may be carried on in man or animals, and the results may be illustrated by drawings or photographs and must be typewritten and sent to the office of the Secretary before July 1, 1913.

This offer is open to students in all countries, and each essay should be accompanied by a motto and a sealed envelope containing the same, with the author's name and address.

THE chairman of the committee of award is Dr. W. S. Hall, Professor of Physiology in the Northwestern University, Chicago, Ill.

All inquiries should be addressed to Dr. T. D. Crothers, Hartford, Connecticut, Secretary.

ON THE MECHANISM OF THE PRESYSTOLIC MURMUR.—Stuart Hart, New York, from a careful study of four cases of presystolic murmurs, believes that in certain cases the short crescendo murmur preceding the first sound of the heart in mitral stenosis is not due to auricular activity. The four cases are described in detail. They presented well marked clinical designs of mitral stenosis. There was at no time an absence of the presystolic thrill and murmur in any of the cases. The graphic records of these showed the ventricular form of venous pulse and an entire absence of evidence of gross auricular contraction.—*Medical Record*, July 1, 1911.

A CLINICAL DEMONSTRATION OF THE FATALITY OF TEXTBOOK HYDROTHERAPY—A WARNING.—Simon Baruch, New York, makes a plea for a more rational use of hydrotherapy. The average textbook gives directions for cold baths which if followed out will cause fatality in cases of typhoid fever and heat stroke. The author has given in his book directions for the practical use of baths, and states that if these directions are carefully followed they will give excellent results. Plunging an individual suffering from heat stroke into an ice bath will often prove fatal if the heart is weak, while a bath at faucet temperature will frequently result in saving life.—*Medical Record*, July 1, 1911.

THE MEDICAL ASPECTS OF MODERN LIFE INSURANCE.—Frederick Hoffman, Newark, N. J., states that insurance medicine is far behind the times as compared with general practice. There is no special insurance medical journal, and all articles on this subject must be published in the general medical press. These articles represent every branch and subject of insurance. Students of general medicine might well give attention to more rigid and careful examinations for insurance and for recruiting purposes.—*Medical Record*, July 1, 1911.

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ORIGINAL COMMUNICATIONS

The Treatment of Acute Gonorrhoea

By CHARLES W. BETHUNE, M.D.

131 Allen Street, Buffalo, N. Y.

IN the treatment of gonorrhoea, as well as other infections, if one's efforts are rewarded by a complete and rapid recovery, too much credit is apt to be ascribed to the treatment and too little to the patient's individual resistance. The relation of the individual resistance of the patient to the individual virulence of the infecting organism is the most important factor in every infectious disease. All that one can hope to accomplish through treatment is to turn the balance in the patient's favor by increasing his immunity and diminishing the virulence of the infection.

During coitus the friction of the vaginal walls upon the lateral surfaces of the glans causes the meatus to gape open, facilitating the entrance of infectious material. Most of this is washed out by the first subsequent urination and were it not for the fact that some of the gonococci may already have entered the numerous tiny intercellular spaces, or that the lacuna magna is so constructed that it cannot be flushed out by the urinary stream, gonorrhoea would be a rare disease.

In addition to these mechanical factors, it must be remembered that some individuals, although notorious rakes, are blessed with such a strong natural immunity that they never become infected. Urination immediately after coitus followed by the instillation of a few drops of a freshly prepared solution of some organic silver salt, Argyrol 5-10 per cent. Protargol 1-3 per cent., is of unquestionable prophylactic value. Irrigation of the penile urethra by the Janet method with potassium permanganate 1-5,000, care being taken to flush the lacuna by directing the stream towards the roof of the fossa, is almost invariably successful if employed within 24 hours after coitus.

The onset of gonorrhoea is heralded by a slight tingling in the fossa navicularis, which draws the patient's attention to his penis. He usually seeks seclusion and proceeds to inspect the organ. The lips of the meatus are found to be slightly swollen and reddened and a drop of muco-pus may be expressed. Medical advice is seldom sought during this stage, but various quack

remedies are tried until after two or three days the increasing burning urination, painful erections and copious discharge, drive him to the physician.

The history of the case should first be taken, notes being made of previous genito-urinary history, habits, date of last coitus, date of onset and presence of painful erections or chordee. It must be remembered that the last coitus may not have been the infecting one, so that the incubation period can only be calculated in cases where there has been no previous exposure for several weeks. The character and seat of pain, whether before, during, after or between urinations, should be ascertained. The penis, praeputium, inguinal nodes, testicles and cord should be inspected or palpated and any deviations from normal noted. A drop of the discharge should be smeared upon two cover slips and stained, one by methylene blue and the other by Gram's. This is of the utmost importance, in order to be sure that we are dealing with a case of gonorrhoea and not an infection by some other pyogenic organism, a urethral chancre or chancroid.

The patient then passes his urine into two large test tubes. If the first tube is cloudy and the second clear, the infection is limited to the anterior urethra; if both are cloudy, the posterior is also infected. A drop of nitric acid should always be added to it to eliminate cloudiness due to phosphates. The test tubes must always be boiled after each patient to eliminate all danger of accidental infection of the next user. This so-called two glass test, for differentiating anterior from posterior gonorrhoea, is of value only during the acute stage or when the discharge is profuse, for when the pus in the posterior urethra becomes too scanty to contaminate the urine in the bladder, the first jets of urine wash out all pus and the second tube is clear.

I have given all methods of treating acute gonorrhoea a thorough trial and have always returned to the Janet method of irrigating with potassium permanganate, finding that it relieves the pain and diminishes the discharge more quickly, and is followed by a smaller proportion of complications than any other method. After urinating, the patient washes all pus and smegma from the penis, drops his trousers to the knees, pulls his shirt up to the umbilicus and reclines upon the table in Valentine's position. Either an ordinary or the Wohlbarst G-U basin should be placed between the thighs to catch the return flow.

There are many tips for irrigating, each operator having a preference—I naturally for my own, illustrated later. In my tip the automatic spring cut-off enables one to regulate the force of the stream by a light pressure with the little finger, releasing the pressure shuts off the flow. A tight connection is assured by

tying a string around the rubber tube over the groove in the handle of the tip. The tip is made by the Sands-Levy Co.

The reservoir of the irrigator is raised 18-24 inches above the top of the table and filled with a warm (105-110° F), 1-5,000 solution of potassium permanganate. The praeputium is retracted and the penis is grasped at the coronary sulcus with the thumb and index finger, the remaining fingers encircling the organ. The tip is lightly held by the spring handle, pressure of the little finger upon the finger-rest regulating the flow. Press upon the spring until the purple solution appears, then shut off the flow, hold the tip one-quarter inch from the meatus, press upon the spring and allow the fluid to flow gently into the meatus.

When the can is empty, drop the tip into the sterilizer, remove the basin, empty it, and dip the notched end into boiling water or pass it through the flame. Neglecting to sterilize the tip will result in infecting patients with more virulent strains of gonococci not to mention syphilis.

Hand the patient a gauze sponge, instructing him to dry the genitals. A three-inch square of gauze in the center of which is a slit three-quarters of an inch long is then pulled over the glans and the foreskin pulled down over it. This is to be changed at each urination. Circumcised patients should wear a gonorrhoeal bag, changing the cotton at each urination.

The patient is then told of the danger of infecting the eyes, is instructed to wash his hands after handling the genitals and to abstain from all alcoholic liquors. Sexual dalliance, coitus or the reading of erotic literature, is absolutely prohibited. Smoking in moderation is not considered harmful. No internal treatment is given as a routine measure beyond drinking as much milk and water as possible to dilute the urine, thus lowering its specific gravity and acidity. The frequent urination also serves to flush the irritating pus out of the urethra.

The various balsams, aromatic oils, and the like, at one time so popular in the treatment of gonorrhoea, are gradually being abandoned, as they have practically no effect upon the urethra, only serving to upset the stomach, thus reducing the patient's natural resistance to the infection.

Constipation is best relieved by cascara. All aloin preparations are to be avoided, as they increase pelvic congestion, markedly aggravating the patient's discomfort. Enemas administered by the patient are taboo, because of the danger of infecting the rectum. A well fitting suspensory relieves the dull, throbbing ache in the testicles and is a valuable prophylactic against epididymitis.

After the first irrigation the patient perceives that the dysuria is markedly diminished, but recommences within twenty-four hours. If the irrigation did no more than to relieve the excruciating pain accompanying micturition, its use would be indicated in every case. But when proper technique is observed, its employment is also followed by a marked diminution of the discharge and a smaller proportion of complications than with any other treatment.

The irrigation treatment does not markedly alleviate the distressing painful, nocturnal erections or chordee. If the patient arises and urinates, the erection will subside; applications of cold water also give quick relief. Anaphrodisiac drugs are at the most very uncertain in action.

The irrigation must be repeated every twenty-four hours. On the second day the tip may be placed against the meatus and the can elevated three inches higher than on the preceding day. The elevation of the can may be increased two or three inches daily during the acute stage, provided the increased force of the stream does not cause pain. In no case should the elevation exceed four feet.

Pain during or following the irrigation is a warning always to be heeded that the stream is too forcible. The most frequent cause of disaster during the acute stage is the ballooning out of the urethra by pressing the tip too firmly into the meatus, not to mention filling the bladder by forcing the cut off muscle. Failure to observe these two points has brought the method into disrepute with many surgeons.

If the patient has gone untreated for the first week or two, the infection will invariably have invaded the posterior urethra. Improper treatment, introduction of urethral instruments, irrigation with a catheter, rough and forcible Janet irrigations and neglecting to urinate immediately before local treatment, are also important factors in the etiology of posterior invasion. When properly conducted irrigations are instituted during the first week, a large proportion escape it.

The onset of posterior invasion is heralded by frequent urgent urination, diminution of the discharge, malaise, and cloudiness of both glasses of urine. The symptoms may vary in severity from very mild manifestations of those enumerated to an intense throbbing pain in the rectum and perinaeum, constant agonizing desire to urinate, and urination terminating with severe tenesmus, often accompanied by a terminal hematuria.

The onset of posterior involvement does not counterindicate the continuance of irrigations. The inflammation of the anterior

urethra persists in spite of the diminution of the discharge and unless it is combated by the irrigations, it will break out afresh as soon as the posterior symptoms subside. The diminution of the discharge during the posterior stage has been the subject of much discussion, the most logical explanation being that the toxins are readily absorbed from the posterior urethra and stimulate the formation of antibodies, temporarily raising the immunity. Returning to the subject of irrigations, no attempt must be made during the acute posterior stage to force the cut-off muscle.

The milder forms of posterior urethritis require no special treatment beyond placing a hot water bag against the perinaeum at night to relieve the constant desire to urinate, or placing a pillow or two beneath the hips, which accomplishes the same result by relieving pelvic congestion. In the more severe cases a tablet may be administered at night containing Morphine, gr. $\frac{1}{4}$, combined with Atropine gr. 1-150. Hot rectal douches (110-120F) administered through a Kemp tip are also very soothing. I have found the following rectal suppository to be even more efficacious than either of the above methods.

Ung. Crede	zss
Ichthyol	zj
Ol. Theobrom. Q. S.	
M. & div. in suppositoria No. vi	
Sig. Insert at night.	

Massaging the acutely inflamed prostate often results in the expulsion of a tree-like cast of muco-purulent material followed by a sudden and complete abatement of the symptoms. Were it not for the fact that epididymitis follows in about 50 per cent. of all cases treated by this method, it would be the treatment par excellence. The vast majority of posterior infections subside spontaneously long before the anterior infection is cured. The subsidence of the acute posterior stage merges into the sub-acute stage which, together with the complications of gonorrhoea, will be discussed in subsequent papers.

131 ALLEN ST.

Acknowledgments:

Valentine; Keyes; DeKeersmacher & Veerhogen; Vecki; and Bauman.

DOCTOR—If you want a medical book (see Mosby and Rebman advertisements), typewriter, vacuum cleaner, an instrument or almost anything else for your office or home, we can save you money and time. Telephone the editor before 1 P. M.

Labor in Moderately Contracted Pelves¹

By DR. FRANCIS C. GOLDSBOROUGH,
Professor of Obstetrics, University of Buffalo

IT is my purpose, this afternoon, to discuss labor in moderately contracted pelves, and to attempt to bring out some of the points which will aid us in the treatment of these cases. I will not go into a detailed description of the various forms of pelvic deformity, but simply say a few words as to what is meant by a moderately contracted pelvis.

Generally speaking, any pelvis in which the diagonal conjugate is 11.50 cm. or less, is classed as contracted. However, we cannot base our treatment solely on the pelvic measurements, as the pelvis is only one factor, though a very important one, which must be considered in any given case. So, it will not be necessary to deal with figures, but simply to discuss the pelvis in general terms. By a moderate degree of contraction, we mean that large group of cases in which the pelvis varies from a trifle below normal to one in which we have a relative indication for Caesarean section,—*i.e.*, one having a true conjugate of 7 cm. or less.

When I say we will not discuss figures, I don't mean to imply that it is not of great importance to measure the pelvis. Careful pelvic measurements are of great assistance, for by them we can determine accurately the size of the pelvis; and in any given case, this knowledge is of the greatest importance.

In fact, if in all cases, the pelvis were measured some weeks before term, it would be of great value, for then the existence of any contraction would be recognised before an actual dystocia forced our attention to it.

The other factors, besides the pelvis, which will enter into the problem are:

The size and consistency of the foetal head;

The amount of molding it will undergo;

And the force of the uterine contractions.

Our ability to determine these factors before the onset of labor is, unfortunately, not very great. None of the methods of estimating the size of the head give us uniformly satisfactory results, and its consistency can only be approximately determined, after cervical dilatation enables us to palpate it and to determine the size of its sutures, and the degree of ossification of the bones. Practically, nothing can be told as to how the

¹. Read before the Eighth District Branch of the Medical Society of the State of New York, Sept. 27, 1911.

head will mold until we see its behavior during the second stage of labor.

In primiparous women we have no way of judging before the onset of labor, of the force of the uterine contractions, because the general muscular development of the patient does not aid us. Multiparae, however, we can form some idea from the previous labors, though it must be remembered that often the contractions are apt to be less forcible with each succeeding labor.

Before considering treatment, it is well to remember that in the great majority of cases of moderately contracted pelves, the labor will end spontaneously, and the slighter the contraction, the higher the percentage will be. And even in quite marked contractions there will still be a goodly number of spontaneous deliveries.

From this it is evident that, whatever our method of treatment, it should include a thorough test of labor, whenever possible, before any operative procedure is determined upon.

It is impossible to give any fixed rules for operative interference, for each case must be studied as labor progresses, and a decision based on the conditions existing. In the majority of cases the child will present by the vertex, and cervical dilatation will be completed in a longer or shorter time,—when the membranes will rupture. Then, if after several hours of good pains, the head shows no signs of entering the pelvis, it is advisable to interfere, before the patient becomes exhausted, and the child is in bad condition.

However, when we have abnormal presentations, interference is often indicated as soon as the second stage is reached, because the position makes spontaneous labor impossible, and to allow the patient to continue in labor is useless and often harmful. In some cases, also, where the membranes rupture at the onset, or early in labor, interference is indicated before complete dilatation of the cervix.

It is well to remember that molding of the head occurs only after rupture of the membranes, and the number of hours the patient is in labor before the membranes rupture gives us no indication to interfere.

The methods of treatment which we will discuss are:

Induction of premature labor,
The use of the Walcher position,
Version and extraction,
Craniotomy,
Caesarean section,
Hebosteotomy (Pubiotomy.)

The induction of premature labor, from four to six weeks before term, is only rarely indicated in these cases, because of the high percentage of spontaneous labors that occur. And when premature labor is induced, the chances for the child are not very good, because of the difficulties attending the rearing of a premature infant. However, I feel that the induction of labor at term, or a few days before, has a distinct field. For, if the patient be allowed to go over time, we have a large child, with a firmly ossified head which does not mold readily, and often an unnecessarily difficult labor.

Before deciding upon any operation for delivery, it is always advisable to see what can be accomplished by the Walcher or hanging position. Often it will be found that with the patient in this position, under light anaesthesia for a short time, the head will enter the superior strait, when either spontaneous delivery will follow, or a comparatively safe and easy forceps can be done.

Formerly, not so much at the present time, podalic version and extraction was highly recommended in these cases. And it is true that the head will often come through the pelvis more easily by this means; but if version is to be done without serious injury to the mother, it must be performed early in the second stage of labor, and before the head has been given sufficient chance to mold and enter the pelvis. Another objection is that if there be any delay in delivering the after-coming head, the child will be lost.

Forceps, properly used, may be often indicated in these cases. But they should be used only after the head has become molded sufficiently to enter the superior strait. They should not be applied to the floating head and attempts made, with brute force, to drag a large head through a small pelvis.

In this group of cases, craniotomy is always indicated if the child dies during labor, or is dead when the patient is first seen. Here, of course, it is done in the interests of the mother, for it renders the delivery much easier and safer. Occasionally craniotomy on a living child is justifiable, when the surroundings of the patient are such that other operative procedures would subject the mother to too great risk. However, repeated craniotomies on the same woman are not justifiable, for the patient could be sent to a well-regulated maternity hospital, where the child could be safely delivered.

Caesarean section need rarely be considered, because we have seen how essential the test of labor is, and when this operation is done late in labor, the result is poor, so far as the mother is concerned.

In recent years, the operation of hebosteotomy (or, as it is commonly called, pubiotomy), has come into great favor; and it is especially indicated in this group of cases, for we can allow a thorough test of labor, trying the Walcher position, give time for molding of the head, and hope, if not for spontaneous labor, at least that the head will enter the pelvis, when forceps may be applied. Failing in this, we can still deliver the patient safely by means of hebosteotomy.

It must be remembered that with contracted pelves we are much more liable to find abnormal presentations, such as transverse and breech. And here the difficulties attending a decision of the best mode of treatment are even greater than with vertex presentations.

Here, however, there is a procedure which will aid us, if in the given case we fear that so much time will be required to deliver the after-coming head as to cause the death of the foetus. The patient can be prepared for pubiotomy, a Gigli saw passed behind the pubis, but before sawing through the bones, the delivery is proceeded with, and if, after a minute or two of traction on the after-coming head, it fails to enter the pelvis, the bone may be quickly sawed through, the delivery completed, and the child saved.

If, on the other hand, the child can be delivered without the necessity of severing the pubis, the skin incision may be closed, and no harm will have been done the patient.

The results of labor in moderately contracted pelves, for the mother should be but little different from labor in normal pelves, if the patient is properly handled, and even where pubiotomy is required the results are excellent. For the child, however, the matter is much more serious, and here the conduct of the labor, and especially the method of delivery will largely influence results. In a given case, the condition of the patient and foetus should be carefully watched; internal examination should be minimal and things should be left to nature as long as possible. However, the patient should not be allowed to continue in labor until exhaustion is present and the foetus is dying, before operative interference is begun.

The choice of operation will depend largely on the conditions present. If the head has entered the pelvis, the child can usually be delivered safely with forceps. If the head is still floating, pubiotomy will give very satisfactory results. While, in abnormal presentations and before attempting version and extraction, if the Gigli saw is put in place, we will still be able to save the child if difficulty is experienced in delivering the after-coming head.

A Case of Laceration of the Trachea

Recovery Without the Usual Tracheotomy

By W. L. WALLACE, M.D., and H. O. BRUST, M.D.
Syracuse, N. Y.

ON June 13, 1910, Mr. Geo. M., a farmer, aet. 44 was received into the surgical ward of the Good Shepherd Hospital, Syracuse, N. Y. Six days previously while performing athletic stunts, he fell from a bar, striking the front of his neck across the back of a chair. He was at once in great distress for breath and coughed up much blood. For six days and six nights he was unable to lie down, and if he dropped off to sleep for a second, his breath would be instantly shut off. He also had great difficulty in swallowing any food or water.

When I saw him he was bent over the back of a chair holding his windpipe with his hand and his breaths were gasps. He was coughing up bloody sputum and was a terrible sight, suffering from dyspnoea, exhaustion and fear of impending death. His temperature was 99.6; his pulse, 100; respiration, 28, very labored. The front of his neck was dark red, swollen hard from chin to thorax. The neck was emphysematous, and all the tissues were distended with air as far down as his nipples. He was able to talk, and I therefore knew that the larynx was uninjured.

General anesthesia being out of the question, we operated, using one half per cent. of cocaine for the skin incision. With the patient sitting in a chair, we made a free cut from the cricoid cartilage to the sternal notch into the bloody, swollen, crackling tissues, and found the trachea crushed. Three or four of the rings were badly broken from about the third to the fifth or sixth. The proximal and distal ends of the broken trachea were entirely separated and out of line, and were held together only by the fibrous membrane which connects the posterior extremities of the cartilaginous hoops. We could not identify the isthmus of the thyroid which seemed to be torn apart.

We passed in a tracheotomy tube and gave him air. In a moment he coughed it out, and before it could be reintroduced he nearly smothered to death and we saved him only by getting the tube out of the way and holding the trachea open with a tenaculum. We then tried the experiment and found he could breathe easily, if we held the ends of the broken tube together. We therefore cut away the protruding splinters of the rings and sewed up the tracheal wound with fine chromic catgut. Most of the stitches were passed through the entire wall of the trachea, fastening and holding the broken rings to the sound rings above and below. As the mucous membrane tended to peel away from

the rings and plug the breathing space, and as the broken rings tended to collapse, we found these through-and-through stitches necessary. Although we had never heard of its being done, we did not see why catgut passed through the mucous membrane should do any harm, when in so many cases a tracheotomy tube is so well tolerated. After getting the trachial tube airtight by stitching a piece of fascia over the repair, we were met with another difficulty. When we took off the tenacula, used to hold the ends of the trachea in line and together, the windpipe collapsed, lacking the supporting cartilage hoops. When we pulled forward again, he could breathe. We therefore passed two or three traction linen sutures into the front of the trachea and brought them forward out of the wound, keeping up the tension while the superficial wound was closed, and fastening them around the dressing covering the wound. A small rubber drainage tube was left at the lower extremity to take care of the infiltrated tissues.

The operation was easy and satisfactory, and was endured gladly, the patient leaving the operating room in good spirits and wonderfully relieved. He immediately took a drink of water, and lay down in his bed and slept naturally for many hours. The next day he was in fine condition and took liquid food easily. The drainage tube was gradually withdrawn during the next four or five days, and at the end of a week, the traction stitches were found to be no longer needed. They were therefore removed and the wound allowed to close, and he has had no further trouble. One month later, his breathing and speaking were normal.

REMARKS:

Comminuted fractures of the trachea are usually compound, as the mucous membrane is generally lacerated. Fracture wounds of the trachea are usually treated by tracheotomy. The results of the treatment are very poor.

Can not the high mortality be reduced by other treatment? One case does not prove a method to be right, but this case is interesting because although it had stood six days and was in bad condition, it made an immediate recovery when simply sewed up. The method of passing the stitches through the entire wall of the trachea including the mucous membrane, was entirely satisfactory, and the traction stitches brought forward from a collapsing trachea and fastened into a wound might be used with advantage under other circumstances, as in some thyroidectomy cases.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

We left our camp near New Bridge on Gaines's farm, at three o'clock Thursday morning, June 5, and marched back to the R. R. at Despatch Station, a distance of eight miles. Crossing the river on the R. R. bridge, we then moved west seven miles towards Richmond, which brought us to Golding's Farm, situate about seven miles from the rebel capital, where we halted. The rains have made the roads and fields muddy and sodden, and we bivouacked that night in a clover field where the horses would sink over hoof in a moment; and this is the place we are to stay in for a month. June 6. The whole regiment is on fatigue duty corduroying roads and building bridges, to enable the artillery and baggage trains to cross over from Dr. Gaines's, where we were, to this point where we are, not more than two or three miles, but which cost us a detour march of sixteen miles to reach. On the 8th our baggage train arrived, so we are living again. We are camped within rifle's shot of the enemy's pickets, protected from their view by simply a skirt of woods. Our brigade has a front line, and is engaged in throwing up intrenchments. Dr. Hall is some better, but not on duty. There is considerable feeling of discontent in the regiment, and some of the officers talk about resigning. I wrote my wife today, in reply to a letter from her beseeching me to come home, that I could not think of resigning in the face of the enemy, especially as such an act would subject me to disgrace forever after. Tom Dewey comes in to see me every day, and his face is real sunshine in the camp.

Monday, June 9. It is cool and comfortable, and the regiment is busy strengthening its rifle-pit front. A small redoubt has been built just at our left, and guns are being mounted in it today. It looks very much as though our Yorktown work was to be repeated here. The 20th N. Y., Colonel Vegesack, (formerly Max Weber's Regiment), joined our brigade today 1,040 strong, and is a fine looking body of men. They have been

at Fort Monroe so long that they look as prim as regulars—in marked contrast to the other troops.

June 10. A cold, disagreeable rain set in about midnight, and the weather today seems more like October than June. The enemy complimented us with a few shells and solid shot just at dusk last evening. While Dr. Hall, Dr. Mulford and I were standing in front of my tent, engaged in conversation, a six-pound solid shot passed over our heads, striking the ground about thirty yards in our rear; another passed over the Fort on our right, and struck near General Smith's headquarters, and several shells burst in the air twenty or thirty yards to our left. Today they began the same sort of entertainment again, but the shells all burst farther to our left, and fell a little short of the line. Wheeler's battery is stationed just at the left of our regiment, but has not yet replied. Captain Wheeler intimated to me today, however, that he should do so the next time they opened fire.

General Prim, lately in command of the Spanish forces in Mexico, paid our camp a visit last Sunday (the 8th), accompanied by General Smith, staff and cavalry escort. He was also attended by several officers of his own suite, wearing the Spanish uniform, which is much more showy than our soiled and tattered dress, presenting thereby a strong contrast. Major Johnson is improving in health, and bids fair to return to duty soon. Dr. Hall is also some better, but I am very suspicious he will be obliged to give up for a time, and possibly go North before he fully recovers.

June 11. This evening the "Rebs" paid us the further compliment of half-a-dozen shells, but without damage. One burst near the color-line, and another in a piece of woods nearby on our left. General McClellan and staff paid us a visit today, he and General Smith visiting the pickets and reconnoitering the lines together. Captain W. F. Wheeler of "Ours," not the artillery officer just mentioned, is not well, but I hope his illness will not prove serious. Today we hear that Memphis has fallen, and that the entire Mississippi is in our possession.

June 12. About noon the rebels sent us four or five shells; again at five o'clock P. M. they did the same; and yet again at sundown, as Colonel Bidwell, Lieutenant Dewey, and I were sitting in front of my quarters a shell passed directly over our heads, killing one of the Cameron Dragoons near Hancock's Brigade; another of the Dragoons was killed on picket today. An alarm on the picket line at one o'clock last night turned out the regiment, but it proved a stampede and we went to bed in an hour, after taking a good view of the eclipse of the moon.

June 13. The regiment is in line of battle every morning at three o'clock and stands under arms until half an hour after daylight, so we don't propose to be surprised by our treacherous foe. This morning we were shelled for two or three hours, but again without damage. They must have fired 100 rounds at us, but the projectiles either fell short or went over our heads. They don't seem to get our precise range, though they come pretty close to it sometimes. General McClellan visited our lines again today, and, as usual, was greeted with great enthusiasm. General Davidson expects an attack tonight, but he frequently gets such an idea into his head, so we don't scare much under that pleasant little bit of camp news.

June 14. It was so extremely hot today that I stripped myself down to my underwear, and lay sweltering in my tent at that. Dr. Hall is not as well and has gone back to Dr. Trent's house, where a hospital has been established, just adjacent to General McClellan's headquarters. Captain Drake is also there, and I visited them both today. I can hear the bands in the enemy's camps playing quite distinctly tonight, which generally means mischief; but Lieutenant Colonel Alberger and 275 men from the 49th are on picket tonight, so we shall be quiet I think, for he keeps the line straight when he is field officer.

June 15. The heat continues so intense that I sent to the woods for young trees, and planted them around my tent to protect it from the sun's rays. This P. M. a thunder shower refreshed and cooled us somewhat; but the pickets were driven in somewhere on our left just as the storm subsided. Captain Wheeler is quite sick, though not dangerously so, I think. He has worked hard of late, having no Lieutenant to assist him, and the fatigue has been too great for his endurance. I sent him to the Trent House today, where Dr. Hall is, where he will be more comfortable, and where his recovery will be facilitated by removal from the noise and excitement of camp. Major Johnson is better, but Colonel Bidwell is not well, though he keeps on duty. Dewey is well, and as genial as ever; so is Alberger.

June 16. The weather has turned cooler. These changes produce considerable sickness among the troops, yet our regiment suffers less in this respect than some of the others in the division. Today the long expected flag, presented by the ladies of Buffalo, arrived and was committed to the custody of the regiment with ceremony. The command formed in hollow square and, in the presence of General Davidson and staff, Colonel Bidwell presented the colors to the regiment with appropriate remarks, followed by the rousing cheers of the soldiers.

Lieutenant McLean was wounded and taken prisoner two or three days ago somewhere in the vicinity of Liberty Hall, or Old Church, where he was doing out-post duty on the extreme right of the army. It appears that the bold rider, Stuart, made the circuit of the Army of the Potomac with 1,500 of his troopers, striking McLean's squadron at the point named, and riding over it pell mell, killing Mac's beautiful white mare, and wounding him in the head. We have heard today of McLean's safe arrival in Richmond.

June 17. This is a quiet day and I took advantage of the lull to visit Dr. Hall and Captain Wheeler at the Trent House, finding them both better. Captain was sitting on the veranda enjoying the refreshing breeze of a mild June afternoon, and I hitched my horse and joined him. We talked over "old times" for an hour, and he seemed better from my visit. It is rumored that the rebels intend to attack us tomorrow, in commemoration of the battle of Waterloo. We shall see. Mr. DeFort, of Company D, has been established as my valet-de-chambre, and he keeps my quarters in such fine order as to excite the envy of all my visitors, who are not a few.

June 18. The enemy attacked General Sumner's line on our left, just at night, killing six and wounding fourteen men. They sent forward two regiments and deployed their skirmishers on our pickets, but were soon driven off and the lines held as before. We are under orders to move at a moment's notice, and have so been since noon.

June 19. All is quiet along the lines, but I think, from movements and preparations which I observe all around, that something is going to be done soon. The North is impatient as I observe from the papers, but this is a great machine to manage and, with a wily enemy opposed, movements must be conducted with caution.

June 20. By official orders from General Headquarters our camp has been designated "Camp Lincoln," in compliment to our illustrious President—a fitting recognition of his greatness. Captain Wheeler is improving; Colonel Alberger is quite sick; Dr. Hall is about the same; Major Johnson is on duty again.

June 21. I visited McClellan's headquarters where I found a sutler who had plenty of good things; I bought a box of figs, and tonight Colonel Bidwell and Major Johnson have enjoyed them with me, in my tent. We are still entertained daily—sometimes two or three times a day—with the shelling by the enemy, generally, however, without damage to our regiment 9 o'clock P. M. Colonel Bidwell has just received an order to

send out a company to strengthen the pickets, and Company A goes in compliance therewith.

June 22. This is the most quiet day we have had for some time—not a shot fired within hearing of our camp. Captain Wheeler is better, and returned to duty today; Alberger is still quite sick. Lieutenant C. H. Bidwell has resigned—his papers came today. He gave me a fine canteen, with an outside pocket for knife, fork, and spoon, and two tin cases for pepper and salt.

June 23. Lieutenant Bidwell started for Buffalo today, and I sent a box of cigars home by him, which were made by one of our men, from tobacco that grew on Dr. Gaines's plantation

June 24. A great thunder shower prevailed all last night, and another came today. I never experienced anything like such severe storms of that character as we have here. The lightning was so continuous that it was quite light the most of the night, and the electricity came so near the earth as to nearly convulse my extremities several times. The rebels are building a fort in our front, which we have just discovered. Four prisoners, probably deserters, were brought through our camp today, on their way to Headquarters.

June 25. Today has been one of considerable excitement; we have been under orders to be ready to move all day, the men keeping their belts on, and extra rations and ammunition have been issued. The line on the left was advanced somewhat today, and the artillery on the right, across the river, has kept up a continuous fire all day from three batteries of thirty pounder Parrott's, apparently at the Fort which the enemy is building in our front. Dr. Hall is better; Colonel Bidwell and Major Johnson are in good spirits, while Alberger is still sick, though a little better today.

June 26. This has been a day of great excitement. About two o'clock P. M. we heard guns in the direction of Mechanicsville, about four miles away, on our extreme right; within an hour the firing so increased as to lead to the conclusion that an important battle was going on; and within another hour we heard that "Stonewall" Jackson had appeared on our right flank with 30,000 men, and that Porter, McCall, and Stoneman were giving him battle. Long and anxiously did we listen to the distant roar of the battle, the cannonading was furious, and at night-fall we began to see the shells bursting over the tree-tops. About eight o'clock P. M., a dispatch from General McClellan was read to the troops, stating that we had driven the enemy from the field. The men fell into line, began to cheer, and

regiment after regiment took it up along the whole line towards our left, until it seemed as though pandemonium had broken loose. At nine o'clock another dispatch stated the enemy to be fleeing towards Richmond, our cavalry and horse-artillery in pursuit. Again the cheering began, and the bands commenced playing, keeping it up until near midnight, the first music we have been allowed since we left the White House. Our loss is supposed to be considerable, as all the ambulances belonging to our command have been ordered to the scene for duty.

June 27. Hancock's Brigade and two regiments of our own, including the 49th, were ordered out this morning to the picket line, all under the command of Hancock. I, of course, went along. We were partially concealed in a piece of woods, but could see the enemy at work on the fort I have before alluded to. We had not been out long before the 6th Maine regiment, who are experienced wood choppers, began cutting down the timber that protected our camp from the view of the enemy. Meanwhile, a battery of seventeen guns—six three-inch guns, six light twelves, and five thirty-pounder Parrott's—was put in battery behind the timber, and after it fell we were in full view. We remained out until this had been accomplished, and then went back to camp, reaching there about noon. The men stacked arms and began, at once, to cook their dinner. Our own dinner was served as usual under the Colonel's fly, and while Colonel Bidwell, Major Johnson, Captain Wheeler and myself were eating, the enemy opened upon us with a heavy fire. The shells flew over our heads thick and fast, a piece of one striking my colored servant's tent just in rear of my own. He was lying down fast asleep at the time, and it awakened him with such fright that he ran away across the field, and never came back. I never saw him afterwards, but learned that he made his way to Harrison's Landing with the army, where he took the first boat for the North. He called upon Dr. McCray, in Buffalo, on his way to Detroit where he lived. He had met the doctor the winter previous, when he visited me at Camp Griffin. To return, the regiment immediately fell into line, and soon we were ordered to the left in support of the battery which had just been erected, occupying some breast-works all the afternoon, and from this point we could plainly see the battle of Gaines's Mill, which was then going on under General Porter.

By nightfall it was plain to be seen that Porter had lost ground, but we did not then realise the full significance of his battle. We went back to our own camp again just at night, and while the men were having supper, an order came for our brigade to go to Porter's assistance. While the regiment was marching

out by the flank to obey the order, the enemy opened upon us with artillery; shells began to fly all around us, one bursting in the flank of the regiment, killing and wounding several men. I dismounted and took the wounded forward into the rifle-pits for shelter, when the order for us to move was countermanded. One of the men killed was the man who made the cigars, that I sent home by Litutenant Bidwell. We remained in line under arms all Friday night, under the greatest tension of nerve and muscle, hourly expecting the enemy to attack.

June 28. The night passed without event, and this morning I rode back to the Trent House Hospital, to see about my wounded who had been sent there the night before. Here I found everything had been ordered away towards Savage's Station, Dr. Hall having gone with the rest; so I returned to camp. While I was away on this mission the rebels attacked our line with the 7th and 8th Georgia Regiments, and were driven off handsomely, leaving Colonel Lamar, of the 8th, in our hands severely wounded. Captain Theodore B. Hamilton, of the 33d was taken prisoner by the rebels in this affair. He is the eldest son of Dr. Frank Hastings Hamilton. This ended the fighting for the day, so far as we were concerned, and at night we lay in the woods, on our left, supporting Mott's battery. Colonel Bidwell, Captain Mott, Major Johnson and myself slept on the ground, in a tent which we found deserted. Our own camp was left standing, but during the night the tents were cut into ribbons, to render them useless to the enemy.

June 29. Our orders were to remain until daylight, then to retire guarding Mott's battery, which we did, and reached the Trent House about eight o'clock A. M., where we found the division drawn up in line. We then moved down along the Chickahominy, guarding the fords and bridges during the forenoon, and brought up on the field of Savage's Station about two o'clock P. M. Here we found Sumner's 2d Corps drawn up expecting the enemy. Our Division took position over in his left near the Williamsburg Road, and rested for an hour or more. Soon after four o'clock, as the enemy did not appear, we moved down the Williamsburg Road about a mile, and rested again. At five o'clock the enemy arrived and attacked Sumner at the Station, whereupon we were recalled to assist him. Brook's Vermont Brigade engaged the enemy at the opening through which the Williamsburg passes out into the field, and lost quite heavily. Some other portions of the Division also suffered, but not as severely as Brook's. These wounded were collected at a house and shop about a mile down the road from the field of action, where a temporary hospital had been established.

A PRISONER.

About eight o'clock in the evening of the 29th, Sunday, while I was busily engaged in the care of the wounded, Dr. Brown, Franklin's Medical Director, came to tell me that the Army was in full retreat, that these wounded men were to be left behind and that, by General Franklin's order, he would detail me as one of the medical officers to remain with them. Dr. Russell of the 5th Vermont, and Dr. Sawin of one of the Vermont Regiments, were also to stay. We kept at our work most of the night, but finally, at near three o'clock A. M., laid down for a little rest, from sheer exhaustion. Meanwhile the army was passing in steady tramp until midnight, when the rear guard went by, leaving only a battery behind; and this by mistake, as I learned afterwards.

Though so very tired I yet could not sleep from the excitement of the situation, and at dawn I arose and began work. I soon heard the enemy's skirmish line advancing slowly through the woods, and presently it came to a halt on a line with the house where we were. I was examining a man's face at the time, who had some of his teeth knocked out, and had placed him in the doorway to get more light when, looking around, I saw some mounted men peering in at me. They proved to be some of General Jackson's officers, whose column was moving on this road, so I told them, briefly, by what authority I was there, and what my business was. One of them, comprehending the situation at once, remarked that he would report the matter to General Jackson, turned upon his horse to go and do so, when Jackson himself rode up. I briefly told my story to him, stating that I had no rations, and needed a guard to prevent the troops from over-running the place, and particularly to preserve the water supply. He directed that a Sergeant and twelve men be detailed as guards, committed other questions arising from our presence there to his Medical Director, and ordered the column to advance.

Sometime during the morning, about ten o'clock I should think, the head of D. H. Hill's Division halted near the Hospital, and from General Hill a pass was obtained which authorised me to visit the field of battle, in quest of any wounded who might have been overlooked. About two o'clock P. M., armed with the pass and accompanied by one of the guards, I proceeded to the field for the purpose mentioned. In going I was obliged to pass the Confederate column, which was still marching along the Williamsburg Road, en route for White Oak Swamp. They were a cherry lot, flushed with their recent victories which they vainly supposed decisive, and greeted me with many playful expressions, such as "On to Richmond," "You are on the right

road," etc., etc. Their uniforms (?) were tattered, but their muskets were bright, and their cannon, though mostly drawn with rope traces and marked "U. S.," were quite capable of doing effectual service.

In the field I met a well-dressed, intelligent, Confederate Ambulance Sergeant, who greeted me pleasantly upon my explaining my mission, and who stated that he was there for a like purpose. He had found a few wounded, and they were removed to Savage's Station on the opposite side of the field, where our army, on retiring, had left about 2,000 wounded, chiefly from the Ellerson's and Gaines's Mills' battles. I counted about seventy Union dead, lying in the open space through which the Williamsburg Road emerges into the Savage Station's Field, whose uniforms were mostly new, and whose pockets were inside out indicating that they had been rifled. These dead belonged, for the most part, to Brook's Vermont Brigade. After an hour or so spent in this way upon the field, I returned to my hospital and resumed work. All the weary day long the Confederate column marched down the road leading past our place, and at night some of their trains camped in the woods near us. During the afternoon we heard the firing at White Oak Swamp where a battle was in progress.

July 1. On Tuesday morning we were moved up to Savage's station with our wounded, and merged into that hospital. Dr. John Swinburne, a contract medical officer without rank, had been left in charge by the Medical Director of the Army of the Potomac, and Major Ray, of Magruder's staff, had been designated as Military Commandant by the Confederate authorities. (Note. See transactions of the *Med. Soc. S. N. Y.* for 1863, P. 128, et seq. for Swinburne's report of this hospital.) I remained at Savage's Station two weeks, and assisted in the care of the wounded. The first day, Tuesday, we distinctly heard the guns at Malvern Hill, and soon learned of the terrible punishment that the Army of the Potomac there gave to Lee and his hospital.

I had charge of about 200 wounded at this hospital and made a number of capital operations, besides innumerable minor ones, and assisted at about 100 made by others. The weather was hot and, as a consequence, many of the wounded did badly, from septic causes. The enemy took possession of a considerable part of the rations and stores which were left for us, appropriating them to their own use regardless of our necessities. While at Savage's (no sarcasm intended) a sergeant of the regular army transferred a colored boy, a servant of his Captain, to my custody, who passed as my servant thereafter.

IN RICHMOND.

On Sunday, July 13, we were loaded upon platform cars and moved into Richmond. Arriving there late in the evening, and finding no ambulances in waiting, we remained at the station all night; in the morning we were distributed to the various tobacco warehouses then being used as hospitals. I was assigned quarters in Libby Prison, with the other medical officers. In the afternoon Lieutenant Turner, the commandant of the prison, ordered a search of my person, claiming that he did so to ascertain if I had any counterfeit Confederate money in my possession. I was not the unhappy possessor of that valuable circulating medium, but *did* have some gold, having been paid partly in that coin a few days before; he cast longing eyes at it, but did not dare to take it. It must be remembered that I was a Medical Officer left wounded under proper orders, and not a prisoner of war in the ordinary acceptation of the term. I was soon assigned to the care of wounded in Warehouse No. 4, about four blocks east of "Libby," on Cary Street. The weather was very hot and the stifling air of the building, saturated with the odor of stale tobacco and without any conveniences whatever, was something almost unendurable. It is a wonder that even so many survived as did. I went to Libby for my meals, and also slept there on the bare floor. I met Dr. Joseph W. Robinson on my arrival at Libby, who had been captured at White Oak Swamp. We joined the officers' mess, purchasing our food with the gold and U. S. currency which we had, and which the rebels were very glad to get in exchange for their merchandise of any kind.

July. 17. Thursday. I obtained a pass from Turner, and visited the officers' prison on 18th Street, where Lieutenant McLean and Captain Hamilton were confined, and whose joint guest I became for the night. They were both very glad to see me, and did all in their power to entertain me pleasantly. McLean was cheerful, making the most of everything, and taking his imprisonment as kindly as possible; but Hamilton was the reverse, feeling downcast in the extreme. However, we had a pleasant visit, and the next morning at nine o'clock I returned to Libby. On my arrival there I found that about 500 wounded were being exchanged, and that a part of them had already been loaded into ambulances, which were drawn up in front of the building. I applied to Dr. Cullen, under whose direction the exchange was being made, for permission to go with them. He readily granted my request, and I boarded a convenient ambulance, taking a seat with the driver. The little colored boy, who became separated from me on my arrival at Libby, now came running up with

tears in his eyes, begging to go along too. I told him to get aboard, the driver having consented, and we were driven to Aiken's Landing on the James River, about ten miles below Richmond.

On our arrival at the Landing we found the Hospital Steamer "Louisiana" at the wharf awaiting us, and the afternoon was occupied in transferring the wounded to the boat. Lieutenant Colonel Sweitzer of General McClellan's staff was the truce officer in charge, and this was the first transaction under the cartel, just then agreed between the hostile powers. I succeeded in getting the colored boy past the guard and safely on board, through the kindness of the Ambulance Sergeant who was in charge at the wharf, and who was the same whom I had met on the field of Savage's Station on the 30th of June. Dr. Robinson was with me, and we were rejoiced to get under the protection of the Stars and Stripes once more.

(Continued.)

New and Non-Official Remedies

I. Compounds of Metals

THE American Medical Association has published a large pamphlet of eighty pages, descriptive of the articles accepted by the Council of Pharmacy and Chemistry, up to January 1, 1911. The list contains some five hundred and forty titles and is well worth reading in its entirety but we have endeavored to condense it for more ready reference.

Omitting synonyms, simple Galenical or pseudo-Galenical preparations, mere proprietary mixtures and trade names for official drugs and chemic substances long known, such as urea, dextrose, laevulose, picric acid, and the like, animal extracts and germ products, the list is reduced by about half. We omit these last two groups for the following reasons: It is now possible to secure a dessication, extract or, in a few instances an active principle of nearly every conceivable organ, including as active principles, familiar and unfamiliar ferments. For nearly every infectious process, it is also possible to secure either a vaccine, i.e., a culture, mitigated or killed, a germ extract, or a serum. Both of these groups of remedial agents are under constant discussion and are subject to frequent improvements.

So far as practicable, the remainder of the list will be discussed under headings corresponding to established, official drugs, for which the newer preparations are claimed to be less objectionable or more potent substitutes.

ARSENIC.

Arsanilic acid is arsenic acid with one hydroxyl group replaced by phenylamine. It is employed in the following derivatives:

Sodium acetyl arsanilate (Arsacetin.)

Sodium arsanilate. Atoxyl and Soamin, differing in water of crystallisation and corresponding respectively to 26 and 22 per cent. of arsenic. The dose of these preparations ranges from one to 20 centigrams (1-6—4 grains). All are supposed to be less toxic than official forms of arsenic.

Arseno-ferratin is the sodium salt of an albuminate of arsenic and iron.

Arsen-triferratin is iron arseno-paramucate. The dose of these two preparations is 30 to 50 centigrams (5—7½ grains).

Ferric arsenite (soluble by addition of ammonium citrate, 1.06 per cent. of arsenic 3—6.5 centigrams (½—1 grain).

Sodium dimethyl-arsenate (Sodium Cacodylate 2½—12 centigrams (1-3—2 grains).

BISMUTH.

Bismuth subcarbonate. Cremo-bismuth is an 8.66 per cent. suspension of finely precipitated bismuth subcarbonate. Lac bismo is a 4 per cent. suspension of mixed bismuth subcarbonate and hydroxid.

Bismuth iodo-subgallate (Airol) externally.

Bismuth methylen-digallate, (Bismal) 10 to 30 centigrams (1½ to 5 grains).

Bismuth bitannate (Tannismuth) 30—60 centigrams (5—10 grains).

Bismuth and lithium citrate (soluble) 10 to 30 centigrams (1½ to 5 grains).

Bismuth beta-naphtholate (Orphol) 1—5 grams (15 to 75 grains).

Bismuth bitannate (Tannismuth) 30—60 centigrams (5-10 grains).

Bismuth tribromphenolate (Xeroform) (nearly 50 per cent. of bismuth oxid) 1—3 grams per day (15—45 grains) also externally as surgical powder.

BARIUM.

Barium chlorid. Highly toxic. Stimulant to unstriped and cardiac muscle. Dose 6—30 milligrams (1-10—½ grain).

COPPER.

Copper citrate (dosage and strength about as for sulphate.)

Cupro-hemol see under Iron.

MANGANESE.

See under, iron, bromine, iodine, and the like.

OSMIUM.

Osmium tetroxid, to produce degeneration of nerves in obstinate painful affections, $\frac{1}{2}$ —1 c.c. of $\frac{1}{2}$ per cent. solution, fresh.

THORIUM.

Thorium nitrate, radio-active, 20 per cent. solution neutralized with ammonia and inhaled for phthisis, and the like.

IRON (See under arsenic.)

Sodium ferri-albuminate (Ferratin) 50 centigrams ($7\frac{1}{2}$ grains).

Ferrous lactate 6—130 centigrams (1—20 grains.)

Iron and manganese peptonate (Ferro-mangan) 4—15 c.c. of solution (1—4 drachms).

Ferric ichthyol (Ferrichthyol) 1—2 grams (15—30 grains).

Ferripyrrine or Ferropyrine, ferric chlorid 36 per cent., antipyrine 64 per cent. 30 centigrams to 1 gram (5—15 grains).

Ferric paranucleinate (Triferrin) (22.5 per cent. iron, 2.5 per cent. phosphorus). 30 centigrams (5 grains).

Haemaboloids, liquid containing 4 per mille of iron, variously combined with proteins and nucleoproteins; 4 per cent. bone marrow extract. Dose 15 c.c. ($\frac{1}{2}$ ounce).

Haemoglobin 30 centigrams to 2 grams (5—30 grains).

Reduced haemoglobin (Hemol) 12—50 centigrams (2— $7\frac{1}{2}$ grains).

Hemogallol (Haemoglobin reduced by pyrogallol) 25—50 centigrams (4— $7\frac{1}{2}$ grains).

Haemoglobin 30 centigrams to 2 grams (5—30 grains). centigrams (4— $7\frac{1}{2}$ grains).

Cupro-hemol (Hemol combined with copper, corresponding to 4 per mille iron, 2 per cent. copper, 12—50 centigrams (2— $7\frac{1}{2}$ grains).

Ovoferrin (Iron Vitellin) solution, 4 per mille of metallic iron. Dose 8—15 c.c. (2—4 drachms).

SILVER.

Silver-nitrate-gelatose (Albargin) 13—15 per cent. of silver.

Ethylene-diamin silver nitrate (Argentamin) 10 per cent. of silver nitrate.

Silver mythylen-nucleinate (Sophol) 20 per cent. silver (2—5 per cent. solutions).

Silver casein (Argonin) 4.28 per cent. of silver.

Silver vitellin (Argyrol) 20—25 per cent. of silver.

Silver proteinate (Novargan 10 per cent. of silver.) (Protargol 8.5 per cent. of silver).

Silver sulph-ichthyolate (Ichthargan) 30 per cent. of silver.

Col'argol (Colloid silver) 85 per cent. silver.

The above are considered less toxic and more efficient than ordinary silver salts. Excepting collargol, they are commonly used for injections, and the like, in a strength corresponding to 1-5—2 per cent. of the silver content, but with various important exceptions. Collargol may be given internally in a dose up to one grain; 2—5 per cent. intravenously; 2—15 per cent. in injections, and the like, the ordinary Crede ointment being 15 per cent.

Silver citrate, locally full strength, injections 1: 10,000—1:2,000.

Silver lactate, (irritating locally in full strength), injections 1:100—1:1,000.

MERCURY.

Mercuric benzoate (approximately equivalent in dosage and external strength to mercuric chlorid).

Mercuric cyanide (same note).

Mercuric oxycyanide (same note).

Mercuric salicylate (same note).

Mercuric succinimide 1—1½ centigrams (1-6—¼ grain by mouth), ½—1 c.c. of 2.5 per cent. solution by daily injection.

Mercury nucleinate (Mercuriol) 10 per cent. metallic mercury. 3—12 centigrams (½—2 grains).

Mergal (1 part mercuric cholate, 2 parts albumin tannate) 4.4 per cent. metallic mercury. 15 centigram capsule (½ grains).

Mercuric sulphate-ethylene-diamine (Sublamine) 44 per cent. metallic mercury. (Strength for external use and internal irrigation about as for mercuric chlorid, 3—4 per cent. solution hypodermatically).

Colloid calomel (Calomelol) (Internally and externally, in ointment or diluted with starch, and the like, about as calomel. Protect from light).

Potassium mercuric iodid, a proprietary preparation in tablet of 113 milligrams (1¾ grains), practically identical with the time-honored solution of mercuric iodid in potassium iodid.

MAGNESIUM.

Magnesium stearate (Dolomol) dressing powder.

ALUMINUM.

Aluminum naphthol sulphonate (Alumnol) powder or solution, ½—20 per cent. according to location, etc.

ZINC.

Zinc permanganate, 1:4,000 locally.

Zinc peroxid 10 per cent. ointment up to full strength as dusting powder.

Zinc sulphanilate (Nizin) 1-5—1 per cent. as astringent and antiseptic, according to location, eye, urethra, etc.

ABSTRACTS

Egg-Albumin and Glucose Test Meal

DR. MAURICE LOEPER, of Paris, *Le Progres Medical*, August 26, 1911, advocates a test meal consisting of two hundred grams of 30 per cent. mixture of coagulated egg-albumin with 10 per cent. of glucose. This has a volume of 250 c.c. and contains exactly eight grams of albumin, twenty of glucose and two hundred and ten of water. Its molecular concentration is 0.83. Even by extracting with the aid of wash water, titration of the sugar readily allows an estimate of the amount of the test meal remaining in the stomach. The stomach contents are evacuated at the end of twenty-five minutes, when the total quantity should be about 80 c.c., and the molecular concentration reduced to 0.60. The rapidity of the latter change corresponds to the gastric circulation, being slow in cases of weak heart and low arterial tension and vice versa. Various tests, some quite analogous to those commonly practised, others of a more recondite nature are made. In Ulcer, 1 gram of albumin remains; in hypochlohydria, 7 grams; in cancer 6 grams; in cancer with pyloric stenosis the same—in typical cases.

The Brain of the Fossil Man of Chapelle-aux-Saints, Correze

Boule and Anthony, *L'Anthropologie*, Volume 22, No. 2, have studied the fissures, sulci and cerebral and cerebellar development by the device of making a cast from the interior of the skull. Like the Neandethal and Spy fossils, the brain is long, wide and flat, differing widely from the majority of present human brains, though resembling certain microcephalic types and being intermediate between the ordinary present or even prehistoric brain and that of the anthropoid apes. The groove for the superior longitudinal sinus is relatively slightly developed, indicating that man has developed the cerebrum partly by encroachment upon this space.

The fissure of Sylvius is broadened anteriorly, apparently indicating a certain degree of extrusion of the Insula, recalling a form existing in man in a certain stage of ontogenic development. The fissure of Rolando presents characteristics also intermediate between man and the anthropoids.

Following the method of Wagner and Vogt, of estimating the dimensions of the various lobes from their endocranial surfaces, the same conclusion is reached. There is a beak, projecting from the anterior portion of the cerebrum, into the ethmoid fossa—olfactory lobe? The general conclusions drawn are that

the man of Chapelle-aux-Saints had a brain well developed for ordinary sensation and motion, but that the frontal, intellectual centers were rudimentary. From the considerably greater projection corresponding to the left parieto-temporal region and the angular gyrus, he was probably strongly right-handed. As to speech, the authors are non-committal though holding on general grounds that this faculty was rudimentary.

NOTE. As there has been much discussion as to whether man was originally ambidexterous, as to the time when right-handedness developed, and whether this trait is to be regarded as progressive by specialisation of function, or retrogressive, the observation in this particular is especially interesting, although it is unsafe to draw conclusions from a single specimen. It has been held that, as Hebrew and certain other ancient languages were written from right to left, instead of by the natural sweep of the hand away from the center toward the right, as in the cases of more modern languages, man was originally left-handed. However, most ancient languages were written indifferently, from right to left or vice versa, or in one direction for one line, turning in the opposite way for the next; in other words, starting each line below where the preceding one left off. This fact has, of course, been made an argument for early ambidexterity.

Such arguments are, however, on a par with the logic of the princess who, being told that, on account of the exigencies of war, the supply of bread had given out, replied "Then let us have toast." They presuppose a desk and some form of paper and fine writing implement. Early writing undoubtedly began with marking with a stick on sand or smooth dirt, or with a pebble on a flat rock. In tracing large characters in this way,—and it is hardly necessary to explain that they were rude pictures and arbitrary signs, not letters—it requires locomotion of the whole body to follow a line, not a mere sweep of the hand across a page. As one would naturally move forward, not backward, right to left writing would be the natural original method of a right-handed people.

Pellagra

DR. CHILTON THORINGTON of Montgomery, Ala., in the *New Orleans Medical and Surgical Journal*, September 1911, opposes the maize theory of pellagra. He quotes Marie's geographic classification of the United States and comments that this list would apply almost equally well to yellow fever and malaria and emphasizes the infrequency of pellagra in the great western corn states. (However, it is only fair to consider that a corn-produc-

ing is not necessarily a corn-consuming state, to the exclusion of an abundance of other food, and that the corn eaten is likely to be of good quality. Ed.) From a study of three hundred and sixty cases, he shows a rapid increase of deaths in the spring and a marked winter decrease, which do not correspond to the conception of a toxic myelitis due to spoiled corn. He notes the relatively large number of insane pellagrins and implies that many cases develop in institutions. (This fact is rather opposed to both maize and entomophoric theories and tends to bear out the editor's hypothesis that pellagra is not of specific nature but a general manifestation of senility, bad nutrition, intestinal putrefaction, and the like). L. O. Howard questions Sambon's theory of conveyance by the sand fly, *simulium reptans*, as that species is not found in the United States, though twenty-seven other species are. (In this connexion, Mr. E. P. Vanduzee of the Grosvenor Library states that several species are found about Buffalo, on both sides of the Niagara River.)

The habitat of the sand fly does not correspond so closely to the distribution of pellagra as that of the mosquito. Pellagra is frequently accompanied with amebiasis, ancylostomiasis, malaria, and the like, pointing to a parasitic origin. Arsenic and quinine are also of value, if not actually curative in the treatment.

Thorington concludes with the suggestion that criminals be subjected to experiments with Balardini's sporosorum maydis; Ceni's aspergillus fumigatus and flavescens; Besta's penicillium glaucum; Tizzoni's streptobacillus pellagrae; as well as Sambon's simulium reptans and various mosquitoes.

DR. GEO. C. MIZELL, of Atlanta, *Journal-Record of Medicine*, August, 1911, has investigated two hundred cases of pellagra, all having eaten cotton seed oil and products. In a control series, without definite symptoms of pellagra but many with suspicious symptoms, 48 per cent. had used these products. Of the 48 per cent, 80 per cent. had begun their use only within three years. He believes, therefore that, in spite of the cheapness and high nutritive properties of the oil cake, meal, and the like, its growing use should be checked pending further investigations.

SAMBON, *Gaz. degli Osp. e delle Clin.* May 28, 1911, cites the general Italian opinion that pellagra is due to maize or rice. Chantemesse and Ramond, in 1898, isolated a bacterium and claimed to reproduce the disease by inoculating rabbits. Sambon holds, however, that most cases included in the clinical symptom complex, are due to protozoan hematophages, of which those most liable to suspicion are the phlebotomus papatasi and the dilophus febrilis.

Pathogeny of Diabetes

FRANK AND S. ISAAC, *Arch. für exp. Path. und Pharm.*, 1911, hold that the normal oxidation of carbohydrates is ultimately from glycogen, not glucose, and that pancreatic lesions prevent the liver and other organs from forming glycogen, on account of the lack of the internal secretion. They claim that, in diabetes, the liver and other organs, glands and muscles, are surcharged with glucose—as would be expected in accordance with any theory—and, especially that they contain only traces of glycogen. We have long felt that an understanding of diabetes required closer attention to the old-fashioned theory of glycogen formation. Still, if their contention that oxidation is ultimately from glycogen directly, without reconversion into dextrose is correct, how can we explain the normal content of dextrose in the blood, especially after administering levulose?

Diabetic Lipemia

KLEMPERER, *Med. Woch.*, December 23, 1910, calls attention to lactescent blood serum as an indication of excess of fats and, still more, of lipoids such as lecithin and cholesterin. In ninety-two diabetics without acidosis, it was absent, whereas it was present in thirty-nine of fifty cases with acidosis.

Experimental Coma

EHRMANN AND ESSER, *Zeit. für Klin. Med.*, 1911, cite the production of typic coma in the dog, by von Marx, by intraperitoneal injection of sodium butyrate. The authors confirm the general principle by administration of butyric acid by mouth to rabbits; 3—5 grams per kilo. producing the ordinary clinical symptoms of diabetic coma.

Myxedematous Coma

HERTOGHE, *Acad. de Belgique*, February 25, 1911, states that this occurs late in the disease, and is due to some exciting cause, dietetic error, infection, intercurrent intoxication, and the like. It may follow the lines of diabetic or uremic coma (Are these really different?) the differential diagnosis being difficult if there is a complicating essential albuminuria. He considers that the coma is both toxemic and mechanic, since the brain is subject to the same infiltration as other tissues, whence compression symptoms ensue.

Diabetic Pleurisies

BRAILLON, *Rev. de Med.*, April 10, 1911, seems to be the first to have made a thorough study of this subject since its inception by Dieulafoy and Ramond. Putrid pleurisies are due to pulmonary gangrene. Sero-fibrinous forms usually develop after the fiftieth year, in cases of moderate severity, without emaciation, corresponding to the clinical type of arthritic diabetes. Arterial supertension, ventricular hypertrophy, bruit de galop and albuminuria are usually found. Dyspnoea is disproportionate to the moderate accumulation of fluid.

An Epidemic of Labial Chancres

J. F. SCHAMBERG, M.D., of Philadelphia, reports a series of nine cases, referred to a young man and transmitted by kissing games, at one or both of two parties. All but one of the cases occurred in girls and were apparently due to direct transmission. The other occurred in a man but must have been due to indirect transfer of the same virus, from the lips of one or more of the girls, not to contagion from a developed female case. One of the eight female cases was not labial but occurred on the cheek and was due not to kissing but, apparently to some other indirect transmission from two of the female patients who worked in the same office with her.

The two parties occurred, March 4 and 18, respectively and all of the cases developed during April, some early in the month.

The epidemic is not without its ludicrous side, especially as Philadelphia has the name of being a slow town but there is very little comedy and many, many years of tragedy not only for the nine victims and the remorseful originator of the epidemic, but for no one knows how many persons affected by an endless chain of infection, including the still-born, short lived and viable but more or less diseased offspring.

Is it not time that we realise that we have passed the period of healthy, intimate, neighborhood life when promiscuous kissing was an innocent diversion, or a mere friendly greeting, and when its physical dangers, less than at present in fact, were not appreciated? Society is a good deal more complex than it was a generation or two ago and, entirely aside from danger of infection with many diseases, the promiscuous exchange of carresses, however minor and innocent in themselves, is liable to lead to loss of mutual respect. It is a safe rule to start the anti-kissing rule in infancy, when strangers do not want to kiss the baby, and to keep it up.—*Jour. A. M. A.*

TOPICS OF PUBLIC INTEREST

Marie Feodorovna Prize Competition

To Be Held in Conjunction with the Ninth International Red Cross Conference, 1912

Subjects for Competition

1. Organization of the methods of evacuation of the wounded on the battlefield, comprising as complete an economy as possible in litter bearers.
2. Portable (surgeons') washstands for war.
3. Methods of packing dressings at the aid stations and in the ambulances.
4. Wheeled stretchers.
5. Carriage of stretcher on mule-back.
6. Folding stretcher easily portable.
7. Transport of the wounded between war vessels, hospital ships, and the coast.
8. The best method of heating railroad cars by a system independent of steam from the locomotive.
9. The best model of a portable Roentgen apparatus, permitting utilisation of x -rays on the battle-field and at first aid stations.

Prizes

- 1 First Prize of 6000 roubles (approximately \$3,000).
- 2 Second Prizes of 3000 roubles (approximately \$1,500) each.
- 6 Third Prizes of 1000 roubles (approximately \$500) each.

When and Where to be Awarded

Inventions entered in this competition are to be displayed at an exhibition to be held on the occasion of the Ninth International Red Cross Conference at Washington, D. C., May 7-17, 1912.

All persons intending to compete for these prizes must forward to the Chairman of the Exhibition Committee, at the above address on or before December 31, 1911, a statement of such intention, giving the number of cubic feet which will be required for the exhibition of their inventions.

Articles entered in this competition must be received, carriage prepaid, at Washington, D. C., on or before April 15, 1912.

Further information may be obtained from the Chairman of the Exhibition Committee.

Trained Nurse—Philippine Service

THE United States Civil Service Commission invites particular attention to the need of trained nurses in the Philippine Service. This Commission to which application should be made in advance, has announced an examination to be held on October 18. This service is an excellent field for graduate nurses, and offers many opportunities and advantages not found in other parts of the Government service. The hours of service are short and vacation leave affords an opportunity for travel in the Islands, China, and Japan. The age limits are 20 and 40.

More than three-fourths of the nurses are on duty at the Philippine General Hospital, Manila, which is a modern institution of 350 beds, for the treatment of acute diseases.

The contract period is two years, and the salary is \$50 per month for the first six months, with subsistence, quarters, and laundry. This is a probational period, and the appointment will not be made permanent unless the nurse's work has been satisfactory. If her services are satisfactory, at the end of the six months she is given a regular appointment at \$60 per month, with subsistence, quarters, and laundry.

CONTRACT PRACTICE. The Committee of the Medical Society of the County of Erie held a meeting on September 18th. The Chairman, Dr. Edward E. Haley, summarised the results as follows: 435 replies have been received from members agreeing to abstain from contract practice, according to the definition formulated. About five refusals have been received. About 100 members have either not been heard from or have replied unfavorably. However, so far as the committee could judge, more than half of this number have merely neglected to reply or have been out of town and are really favorable to the recommendations of the committee. Some of the unfavorable replies seem to be due to unwillingness to commit one's self rather than to practice on contracts and some are due to a misunderstanding of the exact definition adopted. Much amusement was caused by a profane and badly spelled anonymous postal card sent to Dr. Haley by an advocate of contract practice. Quite a number of letters were received from distant parts, commending the work of the Committee and it was learned that Norristown, Pa., Bucks Co., Pa., Niagara Falls, Lockport, Jamestown, N. Y., already have in force agreements similar to that proposed for Erie Co. It was also reported that every Italian physician in the city, whether a member of the County Society or not, had pledged himself against contract

practice. This is an important matter since this race is particularly prone to benevolent organisations and has resorted largely to medical attendance on a contract basis, without regard to the extent of service required. According to the latest information, about 33 physicians in Buffalo are doing contract work.

ECONOMICS OF TUBERCULOSIS. All are familiar with the arguments based on the valuation of human lives. Such arguments seem to us fallacious. In the first place, they tend to distract attention from strictly humanitarian motives. In the second place, granted a reasonably well populated district, it is questionable whether a human life really has a money value, except when the death of the supporter of a family throws the dependents upon the charity of the community. With very rare exceptions, there are many more persons capable of filling a position than there are chances of employment in that particular position. Dr. J. Ed Dube (*Le Journal de Medecine et de Chirurgie*, Montreal, September 1911) makes a more convincing economic argument for the prevention of tuberculosis. He estimates that of 5,000 consumptives at Montreal, 1,000 require free care in some sort of institution, for an average of a year each—not necessarily at the same institution or continuously—at an average cost of \$1.20 a day—total \$438,000. Placed in proper sanitariums, the cost would be only \$1.00 a day and 700 would be cured at the end of 250 days on the average—\$175,000. The 300 fatal cases, would cost for an average of a year, \$109,000. Total \$284,000, saving \$154,000, besides the economic value of the persons restored to health.

NATHAN STRAUS of New York has been appointed by President Taft to represent the United States at the International Congress for the Protection of Infants, in Berlin, September 11-15, 1911; also at a congress to consider the problem of tuberculosis at Rome, to be held next spring. Nathan Straus has probably saved more lives than can be credited to the direct ministrations of any physician and he has done so by following expert advice and co-operating with professional philanthropy. His appointments are at once a recognition of his past services and an opportunity for further usefulness. May we add an appreciation of the breadth of his philanthropy in ignoring race lines and a protest against the stale joke as to the reputed lack of generosity of his race? So far as our experience goes, no people are more ready to respond, according to their ability to a charitable appeal, none less limited by racial or religious prej-

udice—with one important exception, that they are too proud to let the burden of their own poor fall on others.

MRS. E. H. HARRIMAN has given \$50,000 to Dr. F. K. Ainsworth, Chief Surgeon of the Southern Pacific R. R. system, to establish a bacteriologic and pathologic laboratory for the benefit of the employes of that system. It is expected that an expert will be obtained from the Rockefeller Institute.

AT the International Hygiene Exhibition at Dresden a department is devoted to showing how fear of sickness in days of old gave the quack and the charlatan a large field for the sale of what they called "preventives." The figure of a woman "guarded against cholera," has a wool abdominal band, a bodice of thick elastic material, a belt adorned with small porous bricks and fastened with a waxed silk ribbon. In the ample sleeves there are tiny brushes and little bags of sand to catch and absorb the "poison," while little tubes containing vinegar and boxes of chalk are concealed under high hair puffs. The top of the hat is provided with a "pinwheel," which revolves when the wearer walks and "keeps the air pure about the wearer."—*Tribune*.

STERILISED SOLUTIONS FOR HYPODERMIC USE.—In view of the pronounced demand for sterile "ready-to-use" solutions of definite dosage, to be administered hypodermically, Parke, Davis & Co. some time ago decided to place a number of such solutions at the disposal of the profession in a form that would make their use both convenient and economical. "Sterilised Solutions in Glaseptic Ampoules" is the term used to designate them, and the company announces about a dozen preparations which it is prepared to supply.

The sealed glass ampoule removes the liability of contamination and deterioration, and eliminates the inconvenience attaching to the preparation of a solution whenever an emergency calls for its use. Moreover, it insures medicaments of established purity and strength. Each package contains a small file by means of which the neck of the ampoule is nicked, so that it may be readily broken off, thus opening the container. An ordinary hypodermic syringe is used. To withdraw the liquid, the needle is inserted to a point about midway of the sloping shoulder while the ampoule is held in a vertical position; by this means the solution is removable, we are told, to the "last drop."

Our readers are advised to consult the display announcement of these sterilised solutions appearing in the advertising pages of this issue of *BUFFALO MEDICAL JOURNAL*, which gives a complete list of the preparations as well as some important suggestions for their use.

Bulletin of the Buffalo General Hospital

VOL. I

OCTOBER, 1911

No. 2

The Harrington Hospital

THE Harrington Hospital for Children, a department of The Buffalo General Hospital, was opened for the reception of patients October 1st. This building is a gift of the late Dr. Devillo W. Harrington, and, as its name signifies, is to be used for children. It is absolutely fireproof in construction, and as the building has been finished for some time, there has been ample opportunity for testing every detail before placing patients in it. The ventilation and heating, after thorough trial, have proven most satisfactory. A food carrier, built on the principle of the fireless cooker, will be used as a conveyor of foods from the main kitchen to the service rooms. This carrier, after a careful test, demonstrated that a meal could be kept hot in it for two hours, should such a demand be made.

The hospital has four wards of twelve beds each, eight private rooms, two rooms for infants whose mothers will occupy nearby rooms or wards, and two operating rooms, besides blanket warming rooms, dining rooms, service rooms, ample bath- and toilet-rooms, lockers, store rooms, and the like. There are also large detention rooms for the reception of patients, where children whose diagnosis is not perfectly clear will be isolated till a positive one can be made. The hospital has six porches—two facing south, two east, and two west—of sufficient area to accommodate at one time one-half the total number of patients which the building can receive.

One of the important departments of the work will be the maternity service, which will be installed on the second floor of the hospital. On this floor there is a special delivery room with all conveniences, including equipment for obstetric surgery, private rooms, the rooms especially for infants, and ample ward space. The General Hospital during the past year has had a large maternity service, due to the establishment of several free beds by friends of the hospital, and with these increased facilities and the skilled care of Dr. Van Peyma and his assistants, there is every reason to believe that this department of the hospital work will become a very important one.

The first floor is devoted to the larger children. Here there is a second operating room, especially equipped for such patients. In addition to the sunny wards, private rooms and full service equipment devoted to them, a playroom, 24 x 50 feet,

has been provided. This is to be supplied with sand boxes, games, and other such therapeutic agents; it is in reality an indoor playground, to supplement the larger outdoor grounds in inclement weather. These latter are in the rear of the building, and give ample space for out-door amusements and exercise.

The opening of the Harrington Hospital is in every way a cause for congratulation. It sets free space in the General Hospital which is much needed for other purposes, insures greater quiet in that building, and gives the children and the maternity cases greater privacy and a fuller consideration of their needs than is possible as part of a general service.

The Enlargement of the Operating Room

THERE is no better indication of the way in which the hospital keeps pace with the advance in medicine than the improved facilities for operative surgery. Some members of the staff can remember when there was but one operating room, and that imperfectly equipped. The last addition gives us six operating rooms, each well prepared for service.

The amphitheatre is, of course, the largest and most complete, being built of marble and white tile, and equipped with practically every appliance required for general surgery. Adjoining this and of the same construction, there was, in the original arrangement, a smaller operating room, a room for anaesthetising, one for disinfection of the hands, one for the sterilisers, one for supplies and a fifth for instruments. It often happened, however, that when both of these operating rooms were in use a third in that immediate vicinity was desired. Moreover, advancing science has shown that good results depend much upon having as complete disinfection as possible of not only the surgeon's hands, but his entire body. Therefore, by the wise action of the trustees, a small ward and one adjoining room have been added to the operating equipment. Each surgeon has now a locker in which to hang the clothes ordinarily worn, in an adjoining compartment he can have a shower bath, and then, donning a suit of sterilised clothing, can enter the operating room practically free from germ-carrying material. There is also an apartment in which the nurses can make such changes in their dress as may be necessary. This extension has made it possible to change the former supply room into an operating room, thus giving three such rooms in that group. There is also a special gynecological operating room in connection with the women's wards. With the two now available in the Harrington, the General Hospital puts six well equipped operating rooms at the service of the medical profession.

The house formerly occupied by Dr. Ross has now been removed, and the frame building just west of it, which is owned by the hospital, is also to be taken away. These changes add about 7,800 square feet to the open grounds of the institution. Plans for their improvement have already been made.

The smoke consuming device installed in the power house last year has not only eliminated the smoke nuisance, so far as the hospital chimney is concerned, but in ten months effected a saving of 428 tons of coal.

Mr. Pardee, president of the Board of Trustees, and Dr. Ross, attended the meeting of the American Hospital Association, which convened in New York on September 19th. The Association, whose purpose is to promote economy and efficiency in hospital management, presented a strong program. Dr. Ross opened the discussion of "Hospital Annual Reports; What for? Who for?" a paper to be given by Mr. Parke, of the Mont-real General Hospital.

The Semi-private Rooms

THE opening of the Harrington Hospital makes possible a very important addition to the resources of the General Hospital itself. The wards vacated by the transfer of the children and the maternity cases will be transformed into semi-private rooms, making, with those already in use, twenty-seven in all. The three semi-circular wards, which are exceptionally pleasant, and have full south exposure, are to be devoted to this service. Each ward is divided by heavy wooden screens into nine sections, giving on the central space where the nurse in charge has her desk. These screened-off spaces accommodate comfortably the furniture of a small room, are bright and sunny, and have ventilation of an excellence which a completely shut-off space of that size rarely possesses. The baths and toilet rooms in connection with these rooms are ample, as they were planned for a ward service accommodating a much larger number of patients. Each group of rooms has immediately adjacent a pantry with hot tables and other appliances for getting the patients' meals to them in appetising condition. The charge for these rooms is two dollars a day, with corridor nursing—that is, the service of a nurse who has charge of four patients.

The extension of this service is significant because it meets the needs of a class who have hitherto not found hospital care readily available. The desires of the well-to-do have been care-

fully considered; the poor need never lack hospital care; but there has been but scanty provision for persons of moderate income. These semi-private rooms are offered with the confidence that they meet a social need.

Report of the State Board of Charities

THE following extracts from the last report of the inspector of the State Board of Charities give a good idea of some phases of the hospital's internal economy:

"The hospital is in charge of a superintendent who is a physician. He is assisted by sixty-five women and twenty-two men who are general employes. A superintendent of nurses, two assistant superintendents, a night supervisor, one graduate head nurse, three graduate operating room nurses, two dietitians, a paid pathologist, ten internes and thirteen orderlies are also employed. Eighty-two nurses are in training. During the day thirty-five nurses and six orderlies care for ward patients, and eight nurses and two orderlies care for private patients." (This, of course, does not include special private nurses.) "A night engineer, a night supervisor of nurses, twelve nurses, four orderlies and a night clerk are on duty from 7 p. m. to 7 a. m. The house physicians and surgeons make formal rounds morning and evening, and also accompany the attending physicians and surgeons when they make their afternoon rounds. The superintendent of nurses and her assistants visit the patients each day, and two social welfare workers look after special cases that are reported to them by the physicians. The food qualities are good and the food is carefully prepared. The housekeeper, who is a registered nurse and a trained dietitian, is in charge of the main diet kitchen and the private patients' food, while another dietitian is in charge of the main kitchen and the diets for ward patients, nurses and internes.

The general sanitary conditions are good. The beds are comfortable, clean, and well made. They are carbolized and the mattresses, rubber sheeting and pillows are carbolised or steam sterilised and aired in the sun after each patient. Clothing of patients is listed, sterilised if necessary, and put in a general locker room. Soiled clothes are kept in canvas bags in the service rooms and sent to the laundry three times a week. The bags are washed once a week. Dressings are kept in covered metal cans in the service rooms and sent to the crematory two or three times a day, and the small covered garbage pails in the pantries are emptied three times a day in the general garbage receptacle, from which it is removed daily. The ward floors

are swept three times daily with brooms with dampened covers on them. The general wards are large airy rooms with windows on three sides. In addition, a fan system of ventilation is in use during the winter months. Admission baths are given to all, and the ward patients have three baths a week.

Admission slips containing all necessary information for vital statistics are made out for each case, and a general record book is kept which contains also additional information. Every case is numbered so that one index answers for all records. A book is kept for the ambulance calls. The patients' charts and medical records are filed in envelopes and kept as permanent records."

THE TECHNIQUE OF URETHRAL EXAMINATIONS.—Walter S. Reynolds, New York, believes that when dealing with a chronic urethritis one should make a clear diagnosis of the extent of the disease in order that the treatment may be effective. The history should be carefully inquired into as to duration of the attack, severity, frequency of urination, and as to what time of the day the symptoms are most pronounced. The examination should be made some five or six hours after urination, preferably after a night without it. A loopful of the discharge should be collected for a smear. The anterior urethra should be washed out with a mild boracic acid solution until the fluid returns clear. Urine should be passed into a clean glass which will contain that from the posterior urethra. Prostate and seminal vesicles should be examined after gentle massage, and the rest of the urine passed for examination of the prostatic secretion. Each specimen should be separately examined, and each will reveal the condition of the respective portion of the urethra. Examination for stricture is then to be made.—*Medical Record*, July 1, 1911.

THE RADICAL FRONTAL SINUS OPERATIONS.—John E. MacKenty and Gerhard H. Cocks, New York, describe their method of operation for frontal sinus disease, and give three illustrative cases. They claim for their method that it is simply a combination of the best methods, gives good drainage, and cures the disease as well as Killian's operation, but without deformity. The entire front wall of the sinus should be removed only for necrosis of the bones. The advantages over Killian's operation are avoidance of facial deformity; dislodgement of the superior oblique tendon to facilitate the removal of the floor of the sinus; and adaptability of this method in cases which have perforated into the orbit with the production of orbital cellulitis. Diplopia is only transitory.—*Medical Record*, July 1, 1911.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

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THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

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Society Transactions

THE BUFFALO MEDICAL JOURNAL wishes to represent the interests of the medical profession of western New York generally and will gladly publish *brief* abstracts of proceedings of any society in its field. Papers embodying original research and observations of exceptional interest to the profession, will also be welcome. Any organisation desiring to publish its transactions in full may arrange for the printing of supplementary pages forming an integral part of the JOURNAL at actual cost.

The Problem of the Laurentian Waters

AT the latest meeting of the Canadian Medical Association, the statement was made, without contradiction, that there was no pure water supply left in Canada. The water problem is one that vitally, as well as economically, affects every community of the globe. Indeed, according to some astronomers whose standing at least entitles them to respectful consideration, it has led, on Mars, to stupendous engineering feats betokening coöperative enterprise superior to anything as yet accomplished on our planet, and resulting in a system of canals and irrigation ditches so that the seasonal stimulation of vegetation is visible across interplanetary space.

If one studies carefully, the maps of the world, one will be struck with the fact that Canada and the north-eastern States are pre-eminentlly favored with large fresh-water lakes. A couple

of lakes well to the north of Russia, Lake Bakal in Siberia, a few large bodies of fresh water in tropical Africa, are the only analogues. Australia, in spite of several large blue blotches on the map, is singularly unfortunate in regard to water supply, owing to the fact that the water sheds are near the coast, resulting in numerous, small rivers tributary to the ocean and a few longer ones which, for the most part, lose themselves in a central desert and vary greatly in volume and potability, according to season.

A water supply derived from large lakes, such as are included in the Laurentian system, is, in many respects, superior to any other, provided, of course, that it is kept free from pollution. Such water is practically unfailing, it varies little in volume or level according to season, it is usually clear, comparatively soft, and free from an excess of mineral matter in solution. From the engineering standpoint and that of commercial use, it is the cheapest and best, largely because a single supply can be lavishly used for all purposes and because, according to standards hardly yet supplanted, sedimentation and filtration, even storage in reservoirs, can be dispensed with.

From the sanitary standpoint, large lakes have the advantage of allowing sedimentation and the death of pathogenic germs from natural extra-corporeal vicissitudes, owing to the slow current. It is, perhaps, worth while to dwell on the fact that we are too prone to consider what artificial factors *kill* germs, and to forget that in unfavorable, natural surroundings, no one of which is positively lethal, germs *die* just as larger plants and animals do. For example, it is altogether likely that if typhoid fever could be prevented for six months, the entire supply of infective bacilli in fomites of various natural kinds, would die out.

Excepting a few local infections practically unknown to European and American physicians, there are only two essentially water-borne infections—typhoid and cholera. With ordinary quarantine precautions at the sea-board, the latter may be considered as practically a dead issue for America. If typhoid could be eliminated—and it will decrease in geometric ratio as sanitary precautions reduce its incidence—even a high grade of pollution of water supplies, would be almost a negligible factor. At the worst, it would produce aggravations of intestinal saprophytosis, and an occasional transmission of entozoa and of infectious germs whose dissemination is mainly by other factors.

The fact has not been sufficiently emphasised that the problem of a pure water supply requires different means of solution according to local conditions. Thus for a small community, it

often happens that both purity and water head can best be obtained by guarding the immediate vicinity of one or more springs. For communities without hills and springs, a series of wells, of ordinary depth or Artesian, may be the best solution of the problem. For communities where the only available source is a comparatively small river, uniting the waters of numerous tributaries and ultimately due to surface drainage of an extensive agricultural region,—as in many parts of Europe, New England, and the like,—protection of the water supply against pollution is practically impossible and filtration is the only feasible device. Hamburg, for instance, starting with the water of the River Elbe, which is not much better than that of the old Hamburg Canal of Buffalo, gets a filtrate containing only about 20 bacteria per c.c. and almost absolutely free from pathogens. Yet one can readily imagine that he tastes the chemic pollution of the water.

In the case of a small lake, like Hemlock Lake which supplies Rochester and the lakes, natural and more or less artificial on which New York City draws, it is mainly a question of expense whether to protect the water shed or to filter. When both the community and the lake are small, as in the case of the "Finger Lakes" of New York, the only practical solution of the problem at present, seems to be a fair degree of precaution against human excrement, repeated bacteriologic tests and public warning to boil the water when these are unfavorable or when typhoid is known to exist on the water shed.

In regard to the Laurentian waters, from Lake Superior and Lake Michigan to the Gulf of St. Lawrence, we should not lose sight of the fact that the original water is almost ideal, both from sanitary, hygienic and economic standpoints, nor of the fact that the appreciable danger of infection is of limited radius in lakes. Just what this radius is, has not been definitely determined, and a wide margin of safety should always be allowed. Yet, allowing for the protective force of islands, break-waters and actual currents, the practical impossibility of conveyance of germs through miles of still water, the effects of sedimentation and oxidation, as well as the mere dying out of germs under the natural vicissitudes to which they are subjected, it is probably safe to assume that no conceivable degree of pollution at the head of a lake will endanger the inhabitants at the foot, and that, barring the possible conveyance by boats, water from near the center of a lake is pure.

Probably the most important point is protection of a community against its own and neighboring sewage. Probably, too, allowing for reasonable precaution against off shore currents,

lines of traffic, and the like, minor sources of pollution can be ignored and disinfection of sewage will be necessary only for fairly large communities.

Yet it is obvious that the problem differs according to location on the Laurentian waters, and to individual circumstances. For instance a small town or household that can not afford to place an intake far from shore might better employ wells or springs, or some filtration system. Several small communities might unite to protect a strip of shore against local contamination. A large city on an inter-lacustrine river, such as Detroit, Niagara Falls, and the like, would perhaps do well to tap the lake above. Lake Erie, being shallow, frequently becomes turbid so that, even if not grossly contaminated, nor requiring filtration as a protection against typhoid, provision should be made for storage reservoirs of sufficient capacity to tide over periods of roily water. For the long stretch of the St. Lawrence, the problem becomes more difficult, even the height of a town above the water must be considered economically with regard to the availability of inland waters, and, in some instances, a separation of potable and commercial supplies, may be advisable.

The control of water supplies is already recognised, though not without dissent, as a proper subject for governmental interference. The peculiar political constitution of the United States, particularly in regard to the opposing views of state and national sovereignty, as well as the fact that any efficient system of protection of the Laurentian waters must be a subject of international coöperation, complicate the problem. We wish to urge the medical profession to take an active part in the solution of the problem, to appreciate the fact that, all things considered, the region involved has a unique asset of enormous value bestowed upon it by nature, a full understanding of which involves a thorough knowledge of physical geography and of geologic factors largely concerned with the glacial epoch but long antedating it. However necessary it may be for each community to protect itself by prompt action, in accordance with existing conditions, a perfect solution of the problem can be accomplished only by a broad and unselfish conception of the many factors involved. These factors are political, economic and commercial, as well as sanitary and we cannot refrain from expressing the opinion that the ultimate solution of the problem will, to a large extent, involve the use of "raw" water by a population freed from the scourge of typhoid by individual attention to single cases and to fomites of special danger.

The Physician as a Business Man

THE business interests of the physician have been very frankly considered of late years and within a year, a special journal, published in Philadelphia, has been established, solely devoted to them. "Business" for our profession, is included under three general headings: economic problems affecting the mutual relations and general welfare of the entire profession; profitable and convenient conduct of the financial side of an individual practice; wisdom in purchasing, expending and investing, after the doctor has earned—and collected—his money.

In regard to the first topic, it should be emphasised that the genuine welfare of the profession involves no conflict with ethical principles, although it may happen that certain prejudices, based on old customs, etiquette and the like, may be confused with ethics in a formal code and may require alteration to conform to modern conditions.

We cannot refrain from a feeling of local pride that the territory of and contributors to the **BUFFALO MEDICAL JOURNAL** have had much to do with some of these readjustments. For example, the long conflict which disrupted the profession of New York State, which brought the State Society out of affiliation with the American Medical Association, of which it was really the founder and which, indirectly led to state control of medical education, was due in large part to a realisation that refusal to consult with a Homeopath, was not a matter of principle but of prejudice. We must not forget that a broadminded respect for individual views and an elevation of medical standards are primarily, ethical reforms. Neither should we ignore the fact that they are matters of sound business policy which have reunited and strengthened the entire profession.

Only recently, the Medical Society of the County of Erie, at the instigation of Dr. Edward E. Haley, has taken up the matter of Contract Practice, in a radical, practical, spirit, considering both the welfare of the profession, the ultimate interests of the laity—since, in the long run, ten dollars' worth of professional service can not be obtained for a dollar—and general principles of fair play. The time is ripe for such a movement and, already, the profession in other localities is showing an interest in the results expected in the home city of the **BUFFALO MEDICAL JOURNAL**. Just as in the former example, there was likelihood of overlooking the business aspects of the reform, in the latter, there is danger that we shall regard and allow others to regard the

reform as purely a matter of business, whereas, it is in the highest degree, one of ethics.

Our attention has been called to the general subject of business, for the medical profession, by two original and an editorial article in the September 1911 issue of the *St. Paul Medical Journal*. Dr. Edwin White, treats of bonds and mortgages; Dr. Webster Wheelock of farm mortgages. The former rather leans toward bonds, on account of the inelasticity of the mortgage in responding to fluctuations of value. Both authors, as well as the editor, warn against the various schemes in which worthless stock is foisted upon an untrained purchaser. There is no doubt but that promoters have extracted millions of hard earned dollars from our profession, which has been regarded as the legitimate prey of mining, plantation and other stock companies, very much as farmers have been considered the special prey of green goods men.

Our advice is not to imagine that hard working, specially skilled business men are going to run a stock company for the sake of investors who know nothing of the business. In a great many instances, the real business of the company is not getting gold, oil, copper, tropical crops, and the like, out of the ground, or manufacturing or retailing goods, but getting your money for a prettily engraved piece of paper. In other cases, the nominal business of the company is actually carried on but the stock receipts are also part of the profits of the manipulators and the stock is merely votes as to how the business shall be managed. In some instances, too, the interest of stock holders is honestly considered and in such companies, the stock is usually above par so that the ordinary investor might as well leave his money in a bank. There are exceptions, but be sure that you really have encountered one before you invest.

We would also advise strongly against investing at a distance. Remember that we naturally envy the other man's lot and while we deny the superstition, instinctively hold to the notion of a land of gold or of one where there is fabulous abundance obtainable with little labor. What Dr. Wheelock says is good advice for the physician who lives near the farm and can watch it, if necessary manage it. What Dr. White says as to the non-participation of mortgage investments in rise of values is true but, if made with a safe margin and for a reasonable time limit, they are also free from the opposite tendency. For one who is a shrewd judge, an out-and-out purchase of tangible property, is, of course better than a mortgage investment and, provided that the property is accessible and actually usable, no great loss need be expected even if visionary hopes of rapid rise in value fail to materialise.

Locations for Recent Graduates

THE general advice has often been given, to locate where one would be willing to spend one's life. On the other hand, recognizing the powerful leverage of money and the desirability of making the most active years of life as productive as possible, it is of advantage to the majority of young physicians who must regard their profession as a means of earning a living, that they should choose a location which shall, practically immediately, yield a living income. The choice of a thoroughly desirable neighborhood, in a city, involves, according to average experience, an income about equal to that of an office boy for the first year and it usually requires about four years to build up a practice that will insure a comfortable, plain living for a single man, or the bare necessities of life for a married man.

It has often seemed that the physician who acquires self-possession, practical experience, and a little capital and reputation in one place and who then goes to another, especially with some definite appointment, in the long run, makes the greatest practical success. On the other hand, the man who changes his location late in life, especially from a small to a large town, usually fails, so that the change, if made at all, should come fairly early in life.

In England, there is an ethical rule—how thoroughly enforced, we do not know—that a young physician must not enter into direct competition with established ones but must obtain a position as assistant, locum tenens or successor to some older doctor. To a certain extent, this principle is felt rather than expressed in small villages in this country. In a recent editorial, we have called attention to the fact that increased educational standards have so far diminished the graduation of physicians that the total is now only about 4,000, and that the mortality of the existing profession is about 3,000. With the increasing numbers and age of the profession and the continuance of the effect of educational standards, it will soon become quite feasible to exact such a requirement for the United States, though it is very doubtful whether it ever will be.

Still, it is obvious that there are very practical advantages for the young physician, in taking the place of an older man removed by death, or still better, by becoming his assistant and later his successor. Taking into consideration available government positions of various kinds, and the development or rapid increase of new settlements, it may be considered already possible for the recent graduate to fall into a position where he is really needed, rather than to jostle his predecessors to obtain standing room.

In Buffalo, during the last year, twenty-five physicians have either died, retired, or removed from the city. Scarcely a week passes but that, in our exchanges or by direct notification, we learn of the death of some practitioner in a neighboring village; often leaving a community without convenient medical service. Another fact that has surprised us, is that the average county of the Empire State, contains about twenty post offices without a physician. As the government is very liberal in establishing post offices, this does not, of course, indicate that there is, in every case, a community lacking a physician. Still, there are few localities in the state except in the mountains, where the open country averages less than thirty persons to the square mile, and few roads which one can travel more than a couple of miles without passing a village or, at least a "Four-corners" which swells the average population materially. We are inclined to believe that a recent graduate, locating by chance in almost any one of the postoffices without a physician would find his average clientele of six hundred population, within a "ride" of four miles, though, of course, this "ride" might be overlapped by that of some established rival.

We have known, personally, of so many young physicians who have chosen village and country practices carefully, and with good success, that we cannot but feel that much of the complaint of overcrowding of our profession is due to lack of appreciation of local competitive factors, such as would receive prudent attention in regard to the location of any other business.

Even in the city, it is worth while to consider carefully the potential demands of a given district, not, of course, overlooking the fact that certain medical centers serve a comparatively large district.

We cannot refrain from adding a word of possible comfort to the unsuccessful physician in the city. We have known quite a number of such, whose lack of success was due to no specific cause but simply to the fact that, where a wide choice is possible, they, for some reason, were passed by for others. Among these, we have known a few who committed suicide, a few others who died pretty directly as the result of poverty—not that any one of them died literally of starvation or lack of clothing and shelter but because, in running the risks that all of us who had to earn their own living, felt that they must, these few succumbed, to pneumonia, grippe, phthisis, and the like. And we have known a few who sought a genuine demand for their services in the country, who found the physical strain of country practice by no means so arduous as it is depicted in novels, who found the fees not much less in theory and much more collect-

ible in practice, beside having actually a far greater purchasing power than in the city. Under the stimulation of work which sought them instead of dodging their pursuit, they have developed self confidence and have waxed fat and prosperous, have been honored in their own locality and have enjoyed far greater success than they could ever have achieved in the city.

Dr. Wiley has not only been retained in his position, with an even firmer hold on the confidence of the profession and the people at large, but has proved that he had not even technically exceeded his authority nor entered into an arrangement to secure expert assistance at a higher rate than provided by law, except in a preliminary way, subject to official approval. The attempt to oust him has proved a boomerang, has developed support from honest manufacturers under control of the Food and Drug Law, and may eventually lead to far more stringent execution of the law, and on a more economic basis.

THE ANTI-VACCINATIONISTS have issued a publication to thwart the efforts of the Buffalo Department of Health. No one can object to this method, providing, of course, that sincere and accurate arguments are used. We believe, personally, in the efficiency of vaccination against small pox, and, in an experience of about 5,000 cases, have never known small pox to develop after vaccination. In the 5,000 cases of vaccination, we have seen only one sore arm of serious degree and this was due to accidental infection with pyogens, under unfavorable surroundings, and it resulted in no permanent damage.

We believe that many anti-vaccinationists hold a mistaken impression of the attitude of the medical profession generally, in regard to vaccination, even charging mercenary motives. The most superficial study of facts suffices to disprove this assumption. Anti-variolar vaccination is about the only medical procedure in which the profession approves of free service to families of abundant means. To a large degree—amounting to about 95 per cent. of our personal experience—professional services are not even paid for at ordinary rates for salaried contracts but are required to be thrown in as good measure by physicians already working at the cheapest rates for municipalities, on board of ships, in the U. S. services, and the like. The relatively few vaccinations performed in private practice, represent the maximum of expense for materials used and the minimum of charges per visit. The profession believes, on sta-

tistic grounds of the most impressive and massive kind, that small pox can be prevented, with a minimum proportion of failures, by vaccination. Holding this view, if it were actuated in the slightest degree by mercenary motives, it would be the most foolish policy to urge vaccination. One case of small pox means more revenue to the medical profession than fifty vaccinations at ordinary private rates and more than it receives from 500 vaccinations as actually carried on.

Nor do we believe that the profession can be charged with being opinionated in the matter. We cannot conceive how any one who has made a careful study of statistics can doubt, either that the incidence and mortality of small pox have been reduced by vaccination to a degree representing the maximum of human perfection, nor that untoward accidents are adventitious and almost negligibly few in number. But no body of men are more eager to learn the truth, none more anxious for the general welfare, none more ready to acknowledge an error.

Anti-vaccination agitation may cause some trouble for health boards, but it will ultimately lead to the prevalence of truth and we are glad that it is assuming a tangible form where argument can be met with argument and statement with fact. We trust that we shall receive, for early publication, an exhaustive statistic and clinical study of this vital subject. Last year over 30,000 cases of small pox occurred in this country, the largest number for years. It is to be regretted that the compilation by the United States Public Health and Marine Hospital Service, could not have secured data as to previous vaccination. From the exceedingly low death rate, about $1\frac{1}{2}$ per cent., we strongly suspect that most of the cases were of varioloid, and that they could have been prevented by repetition of vaccination. It is significant that the incidence varied from $\frac{1}{2}$ to 4 or 5 cases per hundred thousand population in states where compulsory vaccination is practised and varied from fifty to two hundred and fifty per hundred thousand in states where one would naturally expect a large number of remotely vaccinated adults and where we may also suspect that school vaccination is not enforced.

It is a matter of history that, before vaccination was practised, small pox was about as prevalent and as fatal as scarlet fever, that is to say, it attacked pretty nearly everyone not in an isolated locality and it killed directly, about one case in ten. It is a safe inference that quarantine and general hygienic and sanitary measures would be about equally efficient for the two diseases. At present, scarlet fever kills, annually, about eleven persons per hundred thousand population. Small pox kills about

one-sixth of one person per hundred thousand, in ordinary years, less than one-half per hundred thousand in 1910, a year of high incidence. IF THIS IS NOT DUE TO VACCINATION, TO WHAT IS IT DUE?

PERSONAL

(The editors would be glad to receive items for this department from any physician, whether a subscriber or not. In the future, we shall rely largely upon notices of removal, change of office hours and personal notes of travel, and the like, furnished by the physician himself.)

DR. IRVING M. SNOW has returned from Europe.

DR. J. A. RAGONE spent September in the Muskoka region.

DR. C. A. TYLER of Alden returned early in September from Toronto.

DR. RAY H. JOHNSON returned early in September from a month's outing.

DR. RUDOLF C. MILLER visited friends in and near Toronto, early in September.

DR. JOHN R. GRAY spent the latter part of August and the first of September in Ontario.

DR. W. H. MARCY returned about the middle of September from his summer home at Webster, Mass.

DR. A. VANDERVEER of Albany, has been spending the summer at Camp Alkmaar, Big Moose Lake, Herkimer County, N. Y.

DR. F. PARK LEWIS, who has spent the summer in Europe, arrived in Buffalo a few days ago, having sailed on La Lorraine.

DR. DANIEL A. EISELINE of Shortsville, a graduate of the University of Buffalo, has been nominated for Coroner by the Republicans of Ontario County.

DR. JAMES L. GALLAGHER has been reelected Supreme Medical Examiner for the Atlantic, Central and Southern States, by the convention of the Ancient Order of Foresters.

DR. M. M. SMITH, of Dallas, Editor of the *Texas Medical News*, paid us a friendly call in September. He is a bright, brainy, practical man and, while he was too courteous to offer advice, we managed to get from him many useful hints which will benefit our readers.

DR. GEORGE R. CRITCHLOW returned from his vacation early in September.

OBITUARY

DR. LEWIS WHEELER ROSE, of Rochester, died August 29, 1911, of heart disease, aged 45. He was a graduate of New York University, 1887, and a member of the A.M.A. and affiliated organizations, of the N. Y. State Pathologic Society, etc. He had been surgeon to the Soldiers' and Sailors' Home at Bath and, from 1892 to 1898 physician to the State Industrial Home. He was on the Surgical Staff of the Rochester City Hospital and had been President of the Medical Society of the County of Monroe.

DR. LEONIDAS FRANKLIN WILBUR, of Honeoye, died September 2, 1911, aged 79 years. He graduated at Harvard in 1854. For over 50 years, he had been a member of the Medical Society of the County of Ontario.

DR. GEORGE CLARK of Byron, was killed by the overturning of his automobile, September 22, 1911. He was 35 years old.

SOCIETY MEETINGS

Mississippi Valley Medical Association

PLANS are being perfected for the big medical meeting in Nashville, October 17, 18, 19, 1911. The local arrangements are in the hands of Dr. John A. Witherspoon and an able committee.

This Association was originally the Tri-State Medical Society of Kentucky, Indiana, and Tennessee, but the scope of its activities was later enlarged, and while its name is of the Valley, it embraces in its membership men from the Atlantic to the Rockies.

Dr. Henry Enos Tuley, of Louisville, Ky., has been Secretary of the Association since the meeting held in Louisville in 1897, and Dr. S. C. Stanton, of Chicago, has served continuously as Treasurer since 1902.

Among the Southern doctors on the program for the Nashville meeting are the following: Louisville—Drs. Louis Frank, Walter F. Boggess, W. D. Haines, E. T. Bruce, Thomas Hunt Stucky; August, Ga.—Dr. Thomas D. Coleman; Asheville, N. C.—Drs. Charles L. Minor, Silvio von Ruck; St. Louis—Drs. George Dock, William Engelbach, Brandsford Lewis; Memphis, Tenn.—Drs. Frank Jones, Frank D. Smythe; New Orleans—Dr. E. M. Hummel; Richmond, Va.—Dr. Robert C. Bryan; Cincinnati, O.—Drs. Earl Harlan, E. O. Smith; Lexington, Ky.—Dr. J. A. Stucky. The following Chicago men are on the program: Drs. Robert H. Babcock, Alexander C. Wiener, Arthur Elliott, Channing W. Barrett, William Thompson, Fenton Benedict Turck, Bayard Holmes, Robert B. Preble, Cary Culbertson.

Tuesday, October 17. Quarterly meeting of Monroe County Medical Society. Program not ready. Largely a business meeting. Dr. W. B. Jones, presiding and Dr. A. C. Snell, secretary. Held in evening at Hotel Seneca.

Wednesday, October 18. Central New York Medical Society. All day session. Hotel Seneca. Dr. W. T. Mulligan presiding. Papers by Dr. G. W. Crile, Cleveland; Dr. J. B. Murphy, Chicago; Dr. Roswell Park, Buffalo; Dr. W. S. Baer, Baltimore and others not definitely determined.

Thursday, October 19. Seventh District Branch of the Medical Society of the State of New York. Annual meeting; all day session. Hotel Seneca.

Preliminary Program.

1. "Tuberculosis of the Pelves in Women," Earl P. Lothrop, M.D., Buffalo.
2. "Surgical Tuberculosis," James A. MacLeod, M.D., Buffalo.
3. "General Considerations in Tubercular Treatment," Norman K. MacLeod, Buffalo.
4. "Salvarsan vs. Mercury," E. Wood Ruggles, M.D., Rochester.
5. "Sanitation of Army Camps," Charles O. Boswell, M.D., Rochester.
6. "X-Ray Examinations as an Aid in Diagnosis," M. B. Palmer, M.D., Rochester.
7. "Influenzal Arthritis," J. P. Creveling, M.D., Auburn.

8. "Proctoclysis and an Apparatus that Works Satisfactorily," H. J. Knickerbocker, M.D., Geneva.

9. "Diagnosis of Diseases about the Waist Line," J. R. Culkin, M.D., Rochester.

10. "A Report of a Case of Paraplegia Inferior, with Treatment and Result," E. C. Foster, Penn Yan.

11. Subject to be announced, Nathan Jacobson, M.D., Syracuse.

12. Subject to be announced, William W. Skinner, M.D., Geneva.

Social. On both days a luncheon will be served by the local society to both visiting organizations and a dinner (subscription) on the evening between the two meetings.

THE next meeting of the Southern Surgical and Gynecological Association will be held in Washington City, December 12, 13 and 14th.

Buffalo Academy of Medicine—Meeting for October, 1911

October 3.—Surgical Section: Some Conditions Simulating Disease of the Spine or Hip; Dr. Prescott Le Breton. Use of Intraarticular Silk Ligaments for Limiting Movements in the Paralytic Joint; Dr. Bernard Bartow. Joint Fractures—Lantern Slide Demonstration; Dr. William Ward Plummer.

October 10.—Medical Section: The Thyroid Gland and the Relation of Basedow's Disease to Surgery; Dr. C. F. Hoover, Cleveland.

October 17.—Section of Obstetrics and Gynecology: Observation of the Pelvic Floor; Dr. Irving W. Potter. Indications for and Technic of Artificial Sterilization of Women; Dr. T. H. McKee.

October 24.—Pathological Section, Kidney and Bladder Stone, Dr. Hugh H. Young, Baltimore.

BOOKS AND AUTHORS

The Long Roll, by Mary Johnston; Houghton, Mifflin & Co., Boston; \$1.40. An interesting historic novel of the Civil War, with war maps and illustrations in color.

Manual of Materia Medica for Medical Students; by Dr. E. Quin Thornton, Assistant Professor of Materia Medica in Jefferson Medical College; Lea & Febiger, Philadelphia and New York. \$3.50; 525 pages.

This is one of the few books which dispense, properly, with a table of contents, though there is a full index. The official

materia medica is given in bird's eye view, classified into inorganic and organic chemicals, products of the animal kingdom by classes, and vegetable drugs by botanic families. Part I briefly discusses posology, prescription writing, incompatibilities, etc. Part II, more than half the book, consists in an alphabetic discussion of official drugs and chemicals, and it becomes clear that the work is a reasonably full treatise on therapeutics and toxicology. Part III gives a complete list of Galenicals. Dosage, already mentioned in the various parts, is repeated in the form of the U.S.P. table of approximate adult average doses.

The limitation of the scope of the work to official drugs, places it out of competition with various other books but lends special value to its pages. For many physicians, Thornton's book is worth its price simply as an argument in favor of a more elastic Pharmacopoeia, for others, merely for the sake of the classification of drugs and the lists of Galenicals. While it is designed particularly for students, undergraduate and post-graduate, who must learn various details often forgotten in actual practice, it is far above the quiz compend class and is a valuable, practical work for all.

The Practical Medicine Series, 10 volumes each year, prices ranging from \$1.25 to \$2.00 per volumes, \$10.00 for the entire set. Under the general editorial charge of **Dr. Gustavus P. Head**; The Year Book Publishers, Chicago.

This review of periodical literature, maintains its standard of excellence and is quite freely illustrated. Reference has already been made to some of the volumes. Vol. 4, Gynaecology is edited by Dr. Emilius C. Dudley; and C. von Bachellet. Vol. 5, Obstetrics, by Drs. Joseph B. DeLee and Herbert M. Stowes. It is impracticable to review in detail, a review of literature. Suffice it to say that the busy physician who wishes the gist of medical advances, or the student who cannot spend time to refer to large indexes, wade through a library of journals and sift out the really original contributions to current literature, here finds most of the work ready prepared.

One Hundred Surgical Problems; **Dr. James G. Mumford**, Visiting Surgeon to the Massachusetts General Hospital, etc., Boston; Published by **W. M. Leonard**, Boston, in the Case History Series. Three hundred and fifty-four pages, several plates, \$3.00.

This series goes back to the clinical style in vogue in the seventeenth century, citing actual cases, arranged in a systematic way, and drawing general conclusions from the evidence presented. While we do not believe that the didactic text book, with

its dicta for typic cases, and merely incidental allusions to actual professional experience can be dispensed with, too many of the new books are obviously made to order by a man with previous books on the same subject spread out on tables. From these, he selects scraps, changes their wording and dictates to a stenographer. A few new points are introduced from journals and a few from the author's (?) experience, the publisher does his best with paper, plates and illustrations, and old authorities are sent to the second-hand dealer or the medical library. It is true that the case-history method is slightly prolix, does not conform so well to typic needs as the didactic method, and is somewhat disjointed. But, it presents actual evidence, it is more interesting to read and the lessons contained impress themselves more readily and more permanently on the mind especially for the practitioner, who is thinking of the test by the patient rather than that by an examining board, and, however much theoretic views change and science alters our conceptions of disease, the greater part of such a work is good for all time. The publisher is to be congratulated on having revived an ancient custom and restored it on modern lines. The author has selected and classified, from a large surgical experience, 100 of the kind of cases which make the greatest demand on the skill and judgment of the general practitioner, which confront him with ethical, diagnostic and therapeutic puzzles. Although a surgeon, the author does not always operate but tries sincerely and, we think, successfully, to help the reader in those frequent sources of anxiety—cases in which the advisability of operation hangs in the balance—and in which actual surgical consultation leads, in many instances, to ill-advised and fruitless interference, the odium and regret for which attach to the original attendant.

Hand Book of Suggestive Therapeutics, Applied Hypnotism and Psychic Science, Dr. Henry S. Munro, Omaha. Published by the C. V. Mosby Co., St. Louis, 3d revised edition, 1911. 8 vo, 409 pages, \$4.00.

While we hold very conservative views as to the possibility of influencing organic or even definite "functional" diseases, through impressions on the conscious centers, and as to the existence of genuine "subconscious" centers, it cannot be denied that the mental state of the patient has an important bearing on the progress of diseases of all natures nor that the physician's duty and practical usefulness include the encouragement, discipline and control of persons of unstable nervous equilibrium. Dr. Munro's book is eminently practical and sound, although in impli-

cation rather than actual statement, it seems to recommend hypnotism for more general use than many consider justifiable.

Manual of the Diseases of the Eye. By Charles H. May, M.D., Chief of Clinic and Instructor in Ophthalmology, College of Physicians and Surgeons, Medical Department, Columbia University, 12mo., 407 pages, with 362 original illustrations. New York: William Wood & Co., 1911. (Cloth, \$2.00.)

May's very excellent Manual of the Diseases of the Eye shows every evidence of having been thoroughly revised in its seventh edition. The use of salvarsan, the Lagrange operation, the Eldridge-Green theory of color vision, and tubercular medication are among the recent medical advances to which reference has been made. An important addition is a chapter on Ocular Manifestations of General Diseases.

The colored plates are especially good. The other illustrations are better than usually encountered in similar books, but there are a few whose omission would enhance the value of the work.

The book is heartily recommended to students. Its title should replace in our college catalogues those of the more comprehensive volumes usually advised in the course of study. Also there is no better eye book for the general practitioner, and particularly for him who is so situated that he has not always available the friendly counsel of a specializing brother.

A book that has gone through seven editions in eleven years and has been translated into six foreign languages must indeed supply a want.

H. W. C.

MISCELLANY

Thanks and an Explanation

WE are duly appreciative of the many kind messages received from readers of the JOURNAL, advertisers, and editors of other journals and for the cordial spirit of coöperation shown by all. With one exception, that of a firm which does not deal directly with physicians and which had carried an advertisement solely out of personal regard for our lamented predecessor, every regular advertising contract has been continued or renewed, several new ones have been added and several others are promised for the near future. With no time for a systematic canvass, over fifty new local subscribers have been secured, leaving less than fifty regular physicians, in actual practice, to be secured in Buffalo. Increased support has also been received

from other cities and villages in our territory and we have been particularly gratified at receiving orders from several distant states, South Africa and South America.

It is only fair to state that the change of management was consummated after the September issue was partly printed—although the present editor had assisted somewhat with the two preceeding issues—and that the compliments received are very largely due to various writers, some of whom have modestly objected even to the initialing of their contributions and from all of whom, we hope to hear later.

We shall appreciate criticism and advice but it is self-evident that it will take a little time to get everything running smoothly.

Parcels Post

HONORABLE JONATHAN BOURNE, JR., of Oregon, in the United States Senate, June 23, 1911, introduced the following bill (S. 2873):

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That from and after the passage of this act no higher postage rate shall be charged for the transmission of mail entirely within the United States or its possessions than is charged for transmission of mail partly within and partly without the United States or its possessions. The Postmaster General is hereby authorised and required to establish and enforce rules and regulations which will give the people of the United States rights and privileges in the use of the United States mails as liberal as the rights and privileges the United States accords to the people of the most-favored nation.

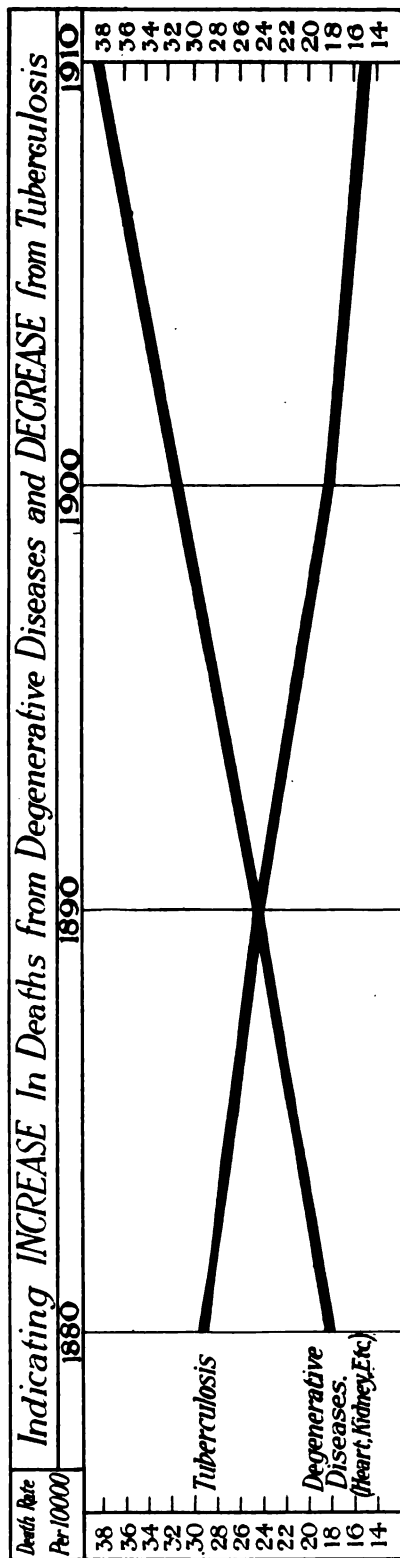
Mr. Bourne commented as follows:

"It may seem strange to Members of the Senate that there should be a possibility of legislation giving American citizens privileges in the United States mails between themselves equal with those enjoyed by residents of this country in transaction of business with residents of foreign countries. The facts are these: Within the United States the rate of postage on fourth-class matter is 16 cents a pound, with a limit of 4 pounds. The United States is party to a treaty under which residents of 29 foreign countries may send fourth-class matter through the United States mails at 12 cents a pound, with a limit of 11 pounds. In other words, a man may send an 11-pound package from San Francisco to Rome, Italy, at 12 cents a pound, but if he wishes to send the same articles to New York he must divide them into packages of not to exceed 4 pounds each and pay 16 cents a pound."

THE Scottish Education Department advises disinfection of books by soaking sheets of blotting paper in 1:200 izar solution, placing each sheet between each two leaves, covering with a waterproof sheet for 24 hours and then gently removing the blotting paper when, if the soaking has not been too great, the book will be found uninjured. This process recalls the Frenchman's flea powder, consisting of powdered brick in attractive wrappers. To dissatisfied purchasers, he explained that the method of use was to hold the flea firmly in one hand and pour the powder down his throat till he choked to death. Except for books of exceptional value, we recommend that a more economic method would be to burn the book and buy a new one.

THE increase in cancer, diabetes, chronic interstitial nephritis and degenerative diseases generally, shown by almost all mortality statistics is viewed with alarm by one school of hygienists, while the opposite school, considers it rather a favorable indication. This paradox is explained as follows: It is true that cancer and degenerative diseases figure more largely in death reports than formerly but, on the other hand, the total mortality rate has markedly diminished. So too have the reports assigning death to unsatisfactory and indefinite terms such as "old age," "debility," "natural causes," etc. In other words, diagnosis is a more exact science, and the apparent increase in the diseases mentioned is not entirely genuine but due to more frequent detection of occult cases. Then too, there has been, in the past twenty years, an enormous saving of life during infancy, and, in adults, from tuberculosis, typhoid and miscellaneous infections. It is still too early to have any considerable increase of what may be termed degenerative material, from the wholesale saving of babies' lives, but quite time to expect that the hundred odd persons, per hundred thousand population, who have *not* died of typhoid in any one year 15 to 25 years ago, will now have to die of something else more appropriate to their increased age.

The Equitable Life Assurance Company has recently established a Department of Conservation (of human life), under the able management of E. A. Rittenhouse. This Department publishes an interesting paper called the *Human Factor*. Thanks to Mr. Rittenhouse, we are able to reproduce from it, the accompanying graphic illustration of the reciprocal relations of tuberculosis and degenerative diseases.



MAJOR WILLIAM G. BISSELL reports colon bacilli in four brands of table water examined. In 1908-9, we attended a case of typhoid in a patient who had drunk nothing but one brand of table water, with a single exception of tap water, for several weeks prior to the attack. At about the same time, many thousand gallons of the same brand had been emptied out in another city because of the finding of colon bacilli but the producers claimed that this did not affect the supply for other places. Just why, unless the bottles were filled from local sources, we do not know. Some one has called attention that the vituperation of the Standard Oil Company is undeserved when water is sold at the same price as refined kerosene. If table water at an absurdly high price is not free from gross contamination, the public is being subjected to a fraud of the worst kind. Until something is done to guarantee against impure bottled water, the plain citizen might as well drink ordinary tap water and he can save money and protect himself effectually against infection by the simple process of boiling and cooling.

AN old friend of the editor's wishes to retire from practice and offers his home and office, in a town of 10,000 for sale or lease. The town is within a few miles of a large city and offers exceptional social advantages while, as to the practice, our friend expects to travel around the world on his profits. It is a curious coincidence that this very practical illustration of one of our editorials was brought to our notice while the latter was being printed.

GEORGE P. WILKINS

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BUFFALO MEDICAL JOURNAL

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ORIGINAL COMMUNICATIONS

Report of a Case of Myoclonus Associated with Unilateral Epileptoid Convulsions

By JAMES W. PUTNAM, M.D.

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and

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THE following case of myoclonus associated with unilateral epileptoid convulsions is reported owing to the infrequency of such cases.

In 1881 Friedreich described under the title of Paramyoclonus Multiplex, a syndrome characterized by clonic spasms affecting chiefly the trunk and extremities, the spasms being short, lightning-like and involving individual muscles and not synergic muscle groups.

Later Unverricht described a form of myoclonus occurring in several members of a family and associated with epilepsy.

The first case of myoclonus associated with epilepsy reported in this country was by Clark, in 1899. The patient was at the Craig Colony, and one of the present writers had the opportunity of studying the case for several years, as well as two others of the seven cases already reported from that institution, and two additional cases which have not yet been reported.

As the bibliography has been so completely presented in the articles by Clark, Lundborg, Hunt, and others, it would be superfluous to repeat it here.

The present case was first seen by us on June 1, 1911, having been referred by the patient's physician, Dr. P. H. Whalen, of Buffalo.

The case differs from most of the recorded cases in the unilateral distribution and infrequency of the epileptoid convulsions.

H. C., male, age 22 years. Family history negative as regards nervous or mental disorders.

Patient had been nervous as a child but otherwise healthy and had devoted considerable time to athletics up to 1905, when the present trouble began.

In 1905, while wrestling, the right arm suddenly became stiff and straight and was followed by jerking and twitchings in the

right arm and leg. There was no loss of consciousness and he recovered completely in a few seconds.

The second attack occurred a few weeks later while he was in a tree picking apples. The right arm began to stiffen and shake and consciousness was lost for a few minutes. Was prevented from falling from the tree during the attack by his companion.

The third attack occurred in 1906, while he was climbing to a mountain spring. Right arm became stiff and trembling and consciousness was lost.

The fourth attack occurred in 1909 while he was home. Attack was limited to right side and there was complete loss of consciousness.

The fifth attack of the same character as the previous ones occurred a few weeks later while he was swimming in shallow water and he was rescued by his companions.

The sixth attack occurred in May, 1911, and was observed by his mother. While going down stairs the right arm began to jerk and he was able to call for help before consciousness was lost. The right arm and leg became stiff and motionless, but there was no clonic convulsion observed on the right side. The left extremities were not involved.

The seventh and last attack occurred while patient was in bed on August 28, 1911. He was awakened by a cramp in the right leg which was drawn up and flexed at knee, the thigh flexed on abdomen and he was unable to extend the lower extremity. Cramp then extended to right arm and consciousness was lost for about 15 minutes. His mother states that the left side was not affected as far as they observed.

In 1905, a short time after the first attack described above, the patient noticed a sudden jerking movement of the right arm, while employed as a telegraph operator. The arm would be thrown forward from the shoulder and he could not keep his hand on the telegraph key, and in writing, the pen would tear the paper and spoil the message.

At first the jerkings occurred only a few times daily but during the following years they became more severe and frequent and were especially so when he was excited. He had so-called "good days" and "bad days" which were directly dependent on his emotional condition. When he was able to keep quiet and had no special irritation he could go a whole day without the jerkings. Any excitement would bring on the spasms with great severity, and he found that whiskey had a quieting influence and he used this freely to keep at work on the days when they were severe. Sometimes one or two drinks would suffice for the entire day.

Physically the patient is a strong, muscular, well developed adult. Chest and abdominal viscera normal. His mental condition is very good.

There is no disturbance of the special senses nor of any of the cranial nerves. The fundus of the eye is normal and the fields normal to rough test. Pupils equal and react to light and accommodation. No disturbance of ocular movements. The facial muscles were not involved in the myoclonic jerkings during any of the examinations.

The sensory functions are normal. There is no anaesthesia, analgesia nor thermanalgesia over any part of the body. Joint sense and deep muscle pain sense normal.

The motor disturbances form the conspicuous part of the clinical picture. There is no weakness of any muscles and the range of movements is normal in all directions, and there are no contractures.

Sudden shock-like spasms occur in the muscles of the neck, shoulders, trunk, abdomen, back, thighs and arms. The spasms are bilateral, but a little more severe on the right side, and may occur involuntarily in paroxysms when patient is sitting quietly in a chair. The head is jerked backward or to one side, the shoulders and arms thrown forward, the trunk suddenly straightened or flexed, or the thighs flexed on the abdomen.

These severe involuntary paroxysmal spasms occur only on the "bad days." On the "good days" they occur only on voluntary movement, and if he is lying quietly in bed or sitting comfortably in a chair with muscles relaxed there is not the slightest spasm.

Extending the arms forward can be done slowly without bringing on a spasm, but as soon as he attempts to shake hands or to touch an object brought near the hand, the violent incoördinate jerking commences in the shoulder muscles and persists until the extremity is brought into a condition of muscular relaxation. The same condition occurs in the lower extremities. This is an emotional excitement as the mere sight of an object being brought near the hand produces the incoördinate movements independent of any voluntary effort on the part of the patient to touch it.

In testing the hand grasp an irregular rhythmical contraction and relaxation is felt in the hand and forearm and a to and fro movement from the shoulder.

Dynamometer shows right hand grasp 37 kilograms and left hand 30.

When the observer's hand is placed over the shoulder muscles during the spasms, the actual movement in the muscles is felt to be greatly in excess of that communicated to the arm. This

is probably because the spasm does not involve all the synergic muscles of the shoulder but affects some in excess of the others.

At times the spasms have been so severe that patient has been confined to bed and every movement is accompanied by the violent incoördinate jerkings. When they are less severe he is able to walk in a jerky, incoördinate manner, the limbs being thrown forward or the body suddenly flexed, and on several occasions he has been injured by falling. On the "good days" he walks fairly well without assistance, but always in a cautious apprehensive manner.

In arising from a sitting position, he slides forward to the edge of the chair, places the feet widely apart and flat on the floor and then waits for a favorable intermission in the spasms to stand suddenly erect with aid of hands on thighs. Sometimes he makes several unsuccessful attempts to arise before accomplishing the act.

There is no Rombergism. When he is able to stand alone there is no increase in the swaying or muscular spasm on closing the eyes.

Slow passive movements of the extremities exert a quieting influence on the spasms. The limbs can be put into any physiological position without bringing on the spasms, and after passive exercise of this kind the incoördinate movements are less severe.

The myotatic irritability is increased and tapping a muscle brings on the spasms which involves the group of muscles and not the isolated muscle which is irritated.

All the deep reflexes are greatly exaggerated and equally so right and left. The abdominal-epigastric reflex is very active. There is no ankle clonus and no Babinski sign, and the Chaddock infra-malleolar reflex is absent.

There is no disturbance of the sphincters. The bowels are usually constipated.

Smoking or indiscretion in diet increases the muscular movements and the last epileptoid attack followed a gastro-intestinal disturbance. Alcohol has had a temporary quieting influence on the myoclonus as is usual in these cases, but he has taken none for some time.

Graduated gymnastic exercises by a competent instructor have resulted in more control over the muscular movements and patient can now perform many movements slowly without exciting the spasms.

Bromides and chloral have a temporary quieting influence but the persistent use of these or other depressants is to be avoided if possible.

The best results are to be expected from dietetic and hygienic measures and the training of the incoördinate movements by graduated and systematic gymnastic exercises.

The bibliography of Myoclonus and Myoclonus-Epilepsy may be found in the following articles:

Clark, Archives of Neurology and Psychopathology, Vol. II. 1899.

Clark, Review of Neurology and Psychiatry, 1907.

Lundborg, Die Progressive Myoclonus-Epilepsie, 1903.

Hunt, J. R., Journal of Nervous and Mental Disease, 1903.

Shanahan, Ibid., 1907.

The Treatment of Subacute Gonorrhoea and Complications

CONTINUED FROM OCTOBER.

By CHARLES W. BETHUNE, M.D.
131 Allen Street, Buffalo, N. Y.

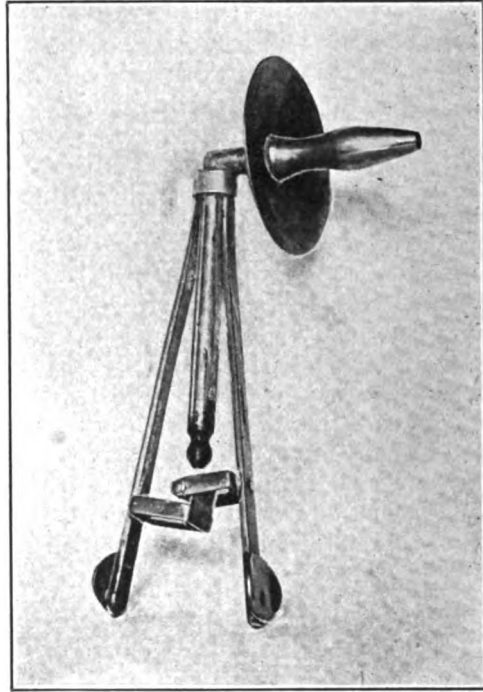
FOLLOWING the termination of the acute posterior symptoms, the so-called subacute stage ensues. It is characterized by a marked increase in the discharge over that of the acute posterior stage, but urination is only slightly painful and the nocturnal erections are not so distressing. Except in very mild cases, turbidity of the second glass of urine persists. In mild cases the purulent excretion of the posterior urethra may be so scanty that the bladder urine is not contaminated and the first jets of urine wash out all pus, the second glass in this case being clear. This fact cannot be repeated too often for it is a common source of error. Turbidity due to phosphates must not be forgotten and is to be eliminated by the addition of a few drops of nitric acid to each glass of urine.

Irrigations are to be continued but as yet no attempt must be made to fill the bladder. The anterior urethra may be gently distended with the irrigating fluid, the patient's sensations being the best guide as to its advisability.

The posterior infection tends towards spontaneous recovery and in the vast majority of cases, unless the prostate and vesicles are involved it terminates in two or three weeks. If cloudiness of the second glass persists more than two or three weeks and distention of the urethra does not cause distress, an attempt to force the cut-off muscle may then be made. After the anterior urethra has been flushed out several times, the tip is gently pressed into the meatus and the patient told to try to urinate, (relax the sphincter). This manoeuvre is generally rewarded by the rapid filling of the bladder. If this method fails, the patient is requested to sit on a hard chair, the tuber ischii resting on the

edge. In this position one but rarely fails to fill the bladder. When both these methods fail, a second or third attempt is almost invariably successful. When the bladder is filled, the posterior urethra is twice irrigated, by the inflow and the outflow. This method is usually followed by a speedy clearing of the second glass.

Filling the bladder through a catheter during the subacute stage or, for that matter, the introduction of any urethral instru-



BETHUNE TIP.

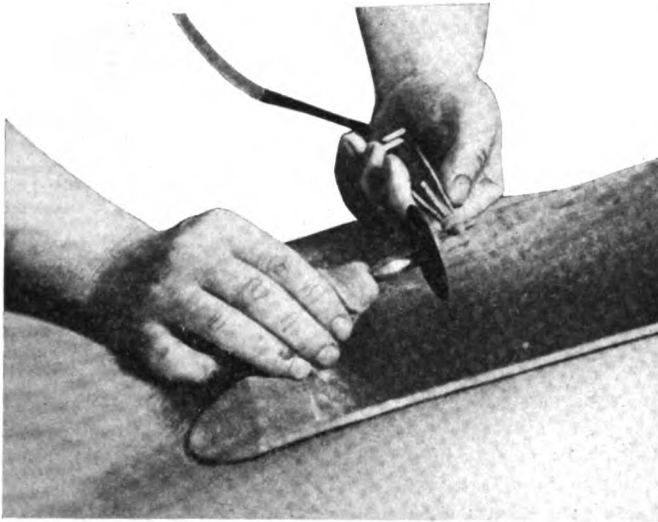
ment is to be emphatically condemned because of the danger of lighting up an epididymitis. The danger of epididymitis is at its height during the first two weeks of the subacute stage, after that it steadily diminishes. Epididymitis will occur in some cases in spite of all precautions, but it is inadvisable to invite its occurrence by over enthusiastic treatment.

Prostatitis and vesiculitis when they complicate a case, usually ensue within a day or two after the onset of the posterior symptoms. The symptoms of these complications are those of posterior invasion, only more accentuated. In mild cases they may cause no accentuation of the posterior symptoms, but the

severer forms, those enumerated in the previous paper together with painful bloody nocturnal seminal emissions. The condition is diagnosed by rectal palpation, the prostate and vesicles being swollen, hot and tender.

In the acute stage the treatment is the same as that of the posterior involvement. In the subacute stage massage must be religiously avoided, the danger of lighting up an epididymitis being great. Vaccines are the most potent weapon in the therapeutic arsenal against this complication.

An initial dose of 5,000,000 stock culture should be injected into the subcutaneous tissues of the thigh as soon as the acute



METHOD OF HOLDING TIP.

symptoms subside. The injection is to be repeated every three days, doubling the dose each time until a reaction occurs or the patient recovers. The reaction is characterized by a temperature of 101-105 Fahrenheit together with malaise on the day following the injection. In about half the cases no reaction occurs, but in spite of its absence the condition rapidly improves. On the day after the reaction there is usually a marked improvement in the symptoms, which is permanent. Massage of the prostate and vesicles should be employed only during chronic gonorrhoea and will be discussed later.

Abscess of the prostate is a rare complication of prostatitis. Although it usually ruptures into the urethra and causes no further trouble, the danger of rupture in other directions with resultant fistulæ and sinuses indicate immediate perineal incision and

drainage. The same treatment applies to the still rarer abscesses of Cowper's gland.

It is impossible to differentiate a severe posterior invasion from prostatitis clinically, and so far as treatment is concerned it is unnecessary.

Epididymitis is the most common of the severe complications of gonorrhoea, severe in that it causes the patient considerable suffering and confines him to bed for a couple of weeks, not to mention the possibility of subsequent sterility. Infection of the epididymis is preceded by inflammation of the vas deferens. The symptoms of vasitis are slight, at the most tenderness over the point where the cord passes through the external ring. When a patient complains of tenderness at this point he should be ordered to bed at once and the scrotum supported by a broad strip of adhesive stretched over the anterior surfaces of the thighs. If this is done many an attack of epididymitis will be avoided.



VALENTINE'S POSITION.

Epididymitis ensues a day or two after the onset of vasitis. The patient first notices that the testicle feels heavy and that there is a tender indurated nodule most often in the lower, more rarely in the upper pole of the epididymis. The epididymis then begins to swell until the testicle is surrounded by a horseshoe-shaped body several inches in thickness. If the patient attempts to stand the pain is excruciating and there is no difficulty in persuading him to remain in bed. The scrotum is to be supported upon the adhesive plaster bridge, mentioned above. Poultices applied to the scrotum give marked relief, ice applications are to be avoided as there are a number of cases reported in which gangrene followed their use. Rubefacient antiseptic ointments are frequently smeared on cloths and applied to the scrotum. I have found the following formula to be very soothing.

R	Menthol	gr. XV
	Ung. Belladonnæ	gr. XX
	Ung. Crede	gr. XXX
	Ichthyol	gr. LX
	Vaseline, Q. S. Ad.	oz. I

The swelling subsides in about ten days, often leaving an indurated nodule about the size of a pea at the site of the original nodule mentioned above. Although this nodule does no harm, unless it is so located that it obstructs the orifice into the vas, it is often a source of great anxiety to the patient. It may gradually disappear, but in case it persists and the patient insists on its removal, the scrotum may be opened and a criss-cross incision of the tunica albuginea made over it. This manoeuvre is almost invariably successful.

If the swelling of the epididymis does not quickly resolve, the testicle should be strapped. Envelop the affected half of the scrotum in a square of gauze, encircle the upper pole of the testicle with the thumb and index fingers, pressing the testicle into the bottom of the scrotum. Bind a strip of adhesive above the testicle so tightly that it cannot slip through. Starting at this so-called choker pass strips of adhesive around under the testicle to the opposite side of the choker until the entire testicle is covered, then apply a second choker over the ends of the strips. When strapped, the size of the testicle rapidly diminishes, necessitating the renewal of the strapping every second day. The strapped testicle should be supported by a suspensory.

Inguinal adenitis, or bubo, is a common complication of acute and subacute gonorrhoea. Painting with tincture of iodine is as good as any treatment. Suppuration occurs but rarely and of course requires incision and drainage.

Balanitis is avoided by scrupulous cleanliness of the preputial cavity. Its treatment consists of frequent cleansing with peroxide followed by the application of a dusting powder. Inflammatory phimosis indicates thorough flushing of the preputial cavity with the permanganate solution together with prolonged soaking in very hot water. If this does not reduce the swelling in a week dorsal incision is indicated. Periurethral abscess indicates early incision, care being taken not to wound the urethra.

Stricture due to a previous attack of gonorrhoea does not seriously interfere with irrigation treatment provided that its calibre is above 15 French. A calibre below 15 French is a marked obstacle, especially if it is situated in the penile urethra. Dilatation during the acute and subacute stages is both painful and dangerous, there is also a constant danger of occlusion of the already narrowed lumen from swelling of the mucosa. If acute

retention occurs, injections of adrenalin chloride 1-100,000, and hot sitz baths and leaching of the perineum should be tried before catheterization. These failing, catheterization is our only resort, under anaesthesia if necessary. I have occasionally been obliged to employ gradual dilatation during the subacute stage and as yet have had no more serious results than epididymitis, but I always do it in fear and trembling.

In uncomplicated cases the discharge of the subacute stage steadily diminishes under the irrigation treatment until only a morning drop is present. This morning drop is the characteristic of the chronic stage which when improperly treated or not treated at all may last for years. The treatment of chronic gonorrhoea will be discussed in a subsequent paper.

Polarimetry as Applied to Urinalysis

By H. F. LICHTENBERG, A.C.

THE principle of polarimetry or optical saccharimetry depends upon the fact that certain substances possess the power of rotating a beam of polarized light either to the right or to the left of the normal. That is to say, that if light, vibrating in a certain plane, is passed through a solution of an optically active substance it is thereby caused to vibrate in another plane which is at an angle to the first plane. This angle of rotation is directly proportional to the amount of active substance in solution.

The polariscope which is used most generally at present is known as the Soleil Ventske and is graduated to read the percentage of sucrose directly. Therefore, the following methods were worked up for use with this instrument. The older form of this instrument was graduated to read in angular degrees and so for the benefit of those who still possess this type of polariscope, a formula is given so that the said methods can also be used in connection with the older instrument. Lately a new form of "Polarizing Saccharimeter" has been designed by Ultzmann. It is intended especially for Urinary work. Its principal difference from the other instrument is, that it reads dextrose directly and uses solar light for illumination. Thus the field must necessarily be a colored one instead of a monochromatic one. When the tube is empty the field is of even color, but when it contains a dextrose solution, two colors, which are separated by a sharp line, are visible. In order to read the rotation it is necessary to turn the adjustment screw until the "transition tint" is obtained.

The greatest objection to the instrument is that this point is more difficult to determine than an even illumination as in the half shade instrument, because the susceptibility to delicate tints varies with the eyes of the operator and thus an extra error

is introduced. But anybody can tell the difference between light and darkness or when the field is evenly illuminated. This is only one of many² reasons why the half shade instrument is to be preferred and therefore the author has worked up his methods to apply principally to the latter instrument.

All of the standard text books on Urinalysis or Clinical Diagnosis give a little space to polarimetry but in perusing them we soon find that they, one and all, attempt to describe some form of the instrument in detail, as to theory, construction, etc. Now while this is all well and good it is only a waste of space; first, because better descriptions can be found in standard text books on physics; second, because the methods for use as given in connection with the description of the instrument are just the converse. They are so brief and so indefinite that they can be applied to only a very few samples of urine, i.e., to those only which are very light in color and contain no albumin. Some of the books give various methods of clarifying and decolorizing the urine intended for polarimetry. These methods are very unreliable and uncertain and also applicable only to some urines. For example, several books direct to decolorize with animal charcoal, which, as shown by Scheibler,¹ absorbs sugar in proportion to the amount of charcoal used and thus the result of polarization will be too low. Others make statements which are, to say the least, absurd, i.e., Emmerson² says that Lead sub-acetate, when used as a decolorizing agent, precipitates some dextrose. In order to prove the fallacy of this statement I examined five samples of urine,—each a normal urine made up with a known weight of dextrose—by the gravimetric method both before and after decolorization, and found absolutely the same percentage of sugar before and after decolorizing.

Therefore, I judge that Emmerson probably forgot to make a correction for the amount of lead subacetate solution added, which mistake would necessarily give low results.

Believing that polarimetry could be applied to urinalysis in a simple practical way, the author has made an exhaustive research (both literary and experimental) on the subject and has found methods whereby, not only sugar but also albumin may be determined by the polariscope. These methods have been tried on quite a number of samples and can be recommended as being perfectly reliable in every way when the directions as given in the following pages are carefully followed.

DETERMINATION OF DEXTROSE.

The sugar which is found in urine in diabetes is the dextrogyrate modification of glucose, namely dextrose and may be determined as follows:

The general procedure is to fill the two decimeter observation tube with the filtered urine. The tube is placed in the instrument (illuminated by a yellow or sodium light), with the scale set at zero, and if the urine contains sugar, the field will be unevenly illuminated. That is, a sharp line will be seen running vertically through the field, dividing it into two equal halves, one of which is brightly illuminated, while the other is dark. The adjustment screw is now turned until both halves of the field are evenly illuminated (or in the case of Ultzmann's instrument, until the two halves are of even color.) The scale is now read and noted. Then the scale should be turned back to zero and another reading made. This should be repeated until three readings have been made. The arithmetical mean of these is then taken and the calculation made as follows:

Since the Soleil Ventske instrument is graduated to give the percentage of sucrose directly, and since the specific rotation of sucrose is more than that of dextrose, it is obvious that a correction must be made.

Specific rotation is usually designated by $[\alpha]$ and D indicates that the D, ray or sodium (yellow) light is used.

This is important because specific rotation varies with the wave length of light. In other words a monochromatic light is absolutely essential and the sodium light which corresponds to the D, ray gives best results.

$[\alpha]_d = 66.48$ for Sucrose and $[\alpha]_d = 52.3$ for Dextrose.

Thus it can be seen that it is only necessary to multiply the reading noted on the sucrose scale, by the constant (.7867) to obtain the reading in terms of dextrose or the number of grams of dextrose per hundred c.c. of urine. For all practical purposes, however, it is perfectly correct to call gms. per 100 c.c. percentage because the difference in specific gravity between distilled water and urine is not enough to introduce an error large enough to be detected by the polariscope which is not sensitive to quantities of sugar smaller than .2 per cent.

The following experiment will serve to illustrate this:

Three grams of pure dextrose dissolved in normal urine and made up to 100 c.c. with the same urine gave these readings, viz., 3.9, 3.8, 3.7 in terms of sucrose, then by calculation of the mean we have $3.8 \times .7867 = 2.989$ per cent. *in terms of dextrose.*

Now to make corrections for the specific gravity which was 1.020 the result is as follows. 100 c.c. of the solution would weigh 102 grams. Then 3 grams: 102 gms. as $x:100$, $102x=300$, $x=2.94$ gms. or per cent. of dextrose in solution (corrected for gravity). Therefore, it can be seen that the error (between

2.98 per cent. and 2.94 per cent.) is too slight to be detected by the polariscope and thus it is not necessary to correct for gravity.

The directions given thus far are not sufficient to apply to all urines. For example, a highly colored or dark urine absorbs so much light as to make the field very dim and indistinct and thus the readings either cannot be made at all, or they will be inaccurate and therefore of no value.

There are two remedies. First, an observation tube of shorter length (one decimeter for example) may be used and then the result multiplied by 2 or if the field is still too dim, the second remedy may be used. Second, the urine may be clarified and decolorized as follows. With a graduated pipette, put into a 100 c.c. volumetric flask exactly 10 c.c. of Official Lead Sub-acetate solution and then add urine until the total volume is exactly 100 c.c. Agitate this gently and allow to stand for about five minutes. (The Lead Sub-acetate precipitates phosphates, chlorides, sulphates, etc. and carries down with it most or all of the coloring matter.) The solution should now be gently shaken and then filtered through a dry filter. The first few drops of the filtrate are apt to come through cloudy. If this is the case, the filtrate must always be poured back through the same filter until it is clear. Two filterings (always using the same filter) are usually sufficient. The two decimeter observation tube is now filled with the clarified urine (which should be almost colorless) and read as before. Then the final result will be the number of grams in 90 c.c. of urine and in order to obtain the per cent. of grams in 100 c.c., it is necessary to multiply this result by 1.10 or increase the reading by 1-9.

If it should be found necessary, both of these remedies may be combined into one. That is, first decolorize as directed, then fill a one decimeter observation tube, read and calculate to dextrose. This will be grams per 90 c.c. Then calculate to grams per 100 c.c. and finally multiply by 2 as the two decimeter tube is standard. This combination makes it possible to determine the sugar in any urine if present in quantity larger than 0.2 per cent. which is sufficient for most practical or clinical purposes.

DETERMINATION OF ALBUMEN.

Albumin exercises a left rotating power over polarized light and thereupon depends the principle of its determination by the polariscope.

The general procedure is the same as for dextrose up to the calculation, which is as follows. The specific rotation of serum

albumin is, $[\alpha]_D = -53$. and $\frac{[\alpha]_D}{[\alpha]_D = -53} = 0.7972$ constant for $[\alpha]_D = 66.48$

changing the albumin reading on the sucrose scale to terms of albumin. The calculation is the same as for converting dextrose.

This theoretical constant was proved to be correct in the following way.

Experiment. Five samples of albuminous urine were examined by the gravimetric method and with the polariscope. Then dividing the quantity of albumin found by the percentage read on the sucrose scale, as per formula, a constant was obtained which agreed with the theoretical constant. Then conversely, the percentage by albumin read on the sucrose scale was multiplied by the constant and results which corresponded very closely with those obtained by the gravimetric method were obtained.

COMPARISON BETWEEN THE GRAVIMETRIC METHOD AND POLARIS-
COPIC METHOD, FOR ALBUMIN.

Percentage of albumin found by the gravi- metric method	Percentage of albumin in terms of Sucrose	Constant or factor found by calculation	Percentage of albumin cor- rected with factor
1.663	2.0	0.7972	1.5944
1.400	1.8	.7972	1.41496
1.801	2.3	.7972	1.833356
2.190	2.7 ^T	.7972	2.15244
2.661	3.2	.7972	2.55104

By comparing columns one and four it can be seen that the results obtained by both methods are practically the same and thus the polariscope furnishes a simple and accurate means for determining albumin.

When it is necessary to clarify the urine for determining the albumin by the polariscope, the Lead Sub-acetate solution aforementioned cannot be used because some albumin is precipitated by the lead sub-acetate solution and thus the results would be low and inaccurate.

Therefore, I have used the solution known as Alumia Cream which does not precipitate the albumin. It is used in the same way as the sub-acetate solution but with high colored urines it is usually necessary to pass the filtrate through the same filter several times. A 50 m.m. observation tube can often be used to advantage. Then the result must, of course, be multiplied by four.

Methods for removing albumin from the urine:

The removal of albumin by heat: If the urine contains more than a very slight trace of albumin it should always be removed

before testing for sugar since the albumin either enters into combination with the reagents or reacts with them in such a manner as to render the tests unreliable. The best method for the removal of albumin is to coagulate it by heat; this should be applied in connection with both qualitative and quantitative analysis.

1. For Qualitative Tests. Take one-third of a test tube of urine, add one drop of dilute acetic acid and about one-half gram of sodium chloride. Boil the whole mixture thoroughly. If a flocculent precipitate does not form, add at intervals drop by drop more acetic acid, heating the mixture after each addition until a distinct flocculent coagulum forms. Filter; the filtrate should be perfectly clear and practically free from albumin.

2. For Quantitative analysis: Put into a beaker 50 c.c. of urine, add a little salt, as before, and two or three drops of dilute acetic acid and boil thoroughly. If a flocculent coagulum of albumin does not appear, add more acid, drop by drop, with constant stirring and continuing the heat until such a coagulum forms.

Filter; the filtrate should be free from precipitate; and wash once or twice with water. Allow the filtrate and wash water to run into a 50 c.c. volumetric measuring flask, and then add sufficient water to make the original volume (50 c.c.). Mix the contents of the flask thoroughly and use for quantitative tests.

In removing albumin by heat a flocculent coagulum should be obtained in all cases, and this is accomplished when the urine has a faintly acid reaction (preferably with acetic acid). In case a flocculent coagulum is not obtained, the filtrate will be more or less turbid, the turbidity being due to the finely divided precipitate of albumin. Such a turbid filtrate is unfit for further tests.

2. Solution for clarifying and decolorizing urines to be polarized for sugar. The Official Lead Sub-acetic solution is used and is prepared as follows: Prepare by boiling 430 grams of normal lead acetate, 130 grams of litharge, and 1,000 c.c. of water for half an hour. Allow the mixture to cool and settle and dilute the supernatant liquid to 125 specific gravity with recently boiled water. Solid lead sub-acetate may be substituted for the normal salt and litharge in preparation of the solution.

3. Solution for clarifying and decolorizing urines to be polarized for albumin. Preparation of the Official Alumina Cream. Prepare a cold saturated solution of alum in water and divide into two unequal portions. Add a slight excess of ammonium Hydroxide to the larger portion and then add by degrees

the remaining alum solution until a faintly acid reaction is secured.

Formula for calculating the percentage of dextrose from readings made on polariscopes graduated in angular degrees.

$$D = \frac{ax100}{[a]Dx}$$

D=the amount of dextrose in 100 c.c. of the solution.

a=the angle of rotation.

l=length of tube used in making observations.

$[a]D^{20} = +53^\circ$ equals the specific rotation of dextrose at 20°C .

If an observation tube of 189.4 m.m. is used with the above mentioned instrument, each angular degree of rotation will correspond to 1 per cent. of dextrose. Thus the above formula need not be taken into account.

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Landolt, *Optische Drehungsvermögen*, Braunschweig, 1898.

Scheibler: *Idem* 1870 p. 218.

Clinical Diagnosis p. 181 (Emmerson).

The Austin Flood

THE Boro of Austin had, at the time of the flood, about 3,000 population. It is situated in a narrow valley at the junction of a small stream flowing east from Keating Summit, and Freeman Run, a very rapid stream flowing southward from Odin, the latter being the main stream which was used by the Bayless Paper Mill.

The industries of Austin consisted of a hard wood mill at the lower end of town, a kindling wood factory and hemlock mill, both just below Main Street, and the Bayless Paper Mill situated about one-quarter mile above the town and in the valley of Freeman Run.

The hospital and school buildings being on a promontory, were not affected by the flood.

The town was practically heated and lighted by natural gas.

The Bayless Paper Company had built a large concrete dam across Freeman Run about two miles above Austin, to regulate the flow of water to the paper mill.

Main Street ran directly across Freeman Run, and between Main Street, and the paper mill there is a flat about 100 rods wide and this flat was the principal residence part of the town.

Above the paper mill, toward the dam, were stored several thousand cords of 4-foot pulp wood.

When the dam broke, three sections, each 30 to 40 feet long, moved downward, opening a gateway at least 100 feet wide, allowing the one-half mile of artificial lake a sudden outlet down the valley.

The thousands of cords of pulp wood were first moved by the water, this mass lodged against the buildings below, until they were pushed from their foundations, and these buildings in turn lodged against other buildings, the force and mass of buildings increasing until the whole residence portion of the flat was swept clean of all buildings to Main Street, both sides of which were built mainly of brick. Some wooden buildings on each end of Main Street finally gave way allowing two channels to form, one into the mill pond and against the hemlock mill, and the other down the course of the main stream, through Costello 3 miles below, and gradually fading out down the Sinnemahoning.

The break in the dam was discovered by a resident on the nearby hillside who fortunately had a telephone and promptly telephoned to Austin, two miles away. "The dam has broken."

The Central promptly turned in a fire alarm, the only thing she could do, then fled to the street crying "The dam has broken." The news spread rapidly, and this saved the lives of hundreds of people.

Very soon the Central telephone station was destroyed and all outside communication by 'phone was cut off.

A man ran from the dam to Odin 4 miles above and telephoned the news to the surrounding towns.

This caused considerable delay, but the news reached Coudersport about 4 P. M.

I arrived on the scene about 5 P. M. and being the County Medical Inspector for the Pennsylvania Department of Health, and the first out of town physician on the ground, I felt it my duty to take charge of the hospital and have remained in charge since, especially as all of the local physicians resided in the flooded district and were occupied with their own troubles.

A careful census made by two competent persons continued over a period of several days visiting individuals representing every family in town, places the loss of life at 75, which does not include outsiders who may have been in town at the time.

At this date, 62 bodies have been recovered. Soon after the flood, fire broke out in three different places, gas lines were broken which fed the flames.

The dam supplied water for fire purposes, but this was gone.

Fire engines from Renova and Smethport arrived about 11 o'clock which saved a general conflagration.

During the week following 9 flood victims have been admitted to the hospital, representing all of the injured and seriously sick as the result of the flood.

All of those admitted were surgical cases as follows.

2 fractured clavicles.

1 fractured thigh (lower third).

1 fractured leg (upper third).

1 rupture of internal lateral ligaments of knee.

1 punctured wound of foot, infected, developed abscess.

All of the above as well as the remaining ones suffered from numerous contusions, principally about the head.

One man with fractured clavicle developed pneumonia and died, all the others are recovering nicely; in fact, all but the one with the broken legs are up and around.

Judging from these and the bodies I have seen in the morgue, I am convinced that the majority died from violence by falling timbers, and being caught in buildings that were crushed.

All of the five physicians lost all their instruments and libraries. Dr. E. A. Mansuy lost his wife.

E. H. ASHCRAFT,
Coudersport, Pa.

DR. ROY J. JUHRE, of Hinsdale, a former student of the editor, and a Red Cross "Minute Man," was preparing to go to Austin on the first train of the day following the flood, when Mr. Almy and others of the Buffalo Charity Organization Society called for him in an automobile and he went breakfastless with them. Some of his observations bring out new points, which we have not seen in the press dispatches. One of the most important is that the flood was anticipated. Material for the reconstruction of the dam was already on the ground. The Pulp Mill management had a chain and ring prepared and a man on duty at the dam to fasten the chain so as to blow a continuous blast of the whistle as a flood warning. This form of signal was arranged with the idea that it could be put into action instantly and allow time for the man on duty to escape to the high ground. Unfortunately, the man on duty at the time that the dam gave way had more heroism than forethought and he stayed at his post and pulled the chain thirteen times, thus giving the fire signal and calling the people toward the danger point. The owner of the property next to Senator Baldwin's had cut an opening in a barb-wire fence to afford quick access to the hill and it was probably due to the fact that Mr. Baldwin was blind

and his wife crippled that they missed this opening in their attempt at escape. The press story regarding the delay of the telephonic warning was also denied.

Owing to the confusion of flood and fire signals, loss of life in the low-lying business section became inevitable. The brick buildings of this part of the town acted as a secondary dam, further delaying the course of the water, so that except for persons trapped in them, most of the loss of life was among children playing in the streets and women going down to seek them. Terrible as has been the catastrophe, it has left behind almost no one to suffer from the sudden taking away of the bread-winner of a family. The Red Cross Society of Philadelphia sent an agent to care for the orphans but he found only one little girl requiring his care.

As is seen from Dr. Ashcraft's letter, the Austin disaster was peculiar in causing very little surgical and medical work. It either killed outright or left the people unharmed or with minor injuries. Sweeping out a channel bare to the bed rock, it left behind almost no nidus of infection, even decomposing corpses especially in cool weather and with comparatively small aggregation of organic matter, being a very minor source of danger to survivors. Psychic shock and exposure produced some sad mental cases, but these were few in number. Three days after the flood, the local hospital had ten vacant beds and about twenty filled, mostly with patients under treatment before the flood.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET
LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN
CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY
CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS;
ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS;
RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY
CORPS, ETC., ETC.

HARRISON'S LANDING.

We steamed out into the river after we were loaded up and cast anchor for the night, as our flag would not protect us from the shore batteries of the enemy after dark. We got up steam at daylight, and in a few hours hove to off Harrison's Landing. Soon after we came to anchor General McClellan boarded the Louisiana by steam launch, and proceeded to the cabin where two regular army officers, Major H. B. Clitz and Captain Chambliss, were lying upon cots. McClellan spent

nearly an hour in low conversation with them, evidently for the purpose of ascertaining all he could of affairs in Richmond. General J. E. B. Stuart came almost daily to see these officers in Libby, sitting between their cots which were contiguous, and spending a short time in conversation with them. These two officers were wounded and captured at Gaines's Mills June 27th. Finally, the medical officer and nurses were put ashore and sent to their respective regiments, while the Louisiana proceeded north to distribute the wounded to the various hospitals.

I reached the camp of the 49th about two o'clock P. M. Saturday, July 19th, and everybody greeted me with kind words, anxiously inquiring after any of their friends in Richmond, and as to my treatment by the enemy. I hardly had time to get some dinner before General Davidson sent for me, and I spent an hour or more with him in telling him my experience, and in describing what I saw in Rebeldom. General Davidson was very gracious and seemed much pleased with the interview. He mentioned me in his report, besides giving me a letter to Governor Morgan recommending me for promotion.

July 20. I visited Dr. Hamilton at General Keyes's Headquarters, where he was serving as Medical Director, and gave him the first news he had received of Theodore. We spent an hour or more in agreeable conversation, and he thanked me very kindly for coming to see him with such good news. On my return from Richmond I found the regiment quite sickly—more so than it had been at any time before. Colonel Bidwell had gone home on sick leave a few days before my arrival, and Dr. Hall had applied for leave on account of sickness, which came back approved on the 20th. The paymaster arrived on the 19th to pay the brigade, and we were paid on the 22d, up to July 1. I sent home \$150.00 by Dr. Hall on the 23d.

I left McLean in good spirits in Richmond, taking his imprisonment quite philosophically. He was wounded by three sabre cuts, two upon his head, laying open his scalp quite extensively, and another in one arm. They all healed kindly, after which he was put on duty in the office of the Commandant of the prison. About 200 officers were confined in the building with him, among whom were Generals McCall and Reynolds. Our camp at Harrison's was pleasantly situated on a knoll, about two miles from the Landing at Berkley, where we had a Regimental Hospital once more, the first since we came on the Peninsula. A cow—tell it not in Gath—was obtained for the use of the hospital, and thus we were afforded nice milk twice a day, which, together with fresh vegetables, made us seem like living again.

July 29. I heard from home today—the first letter in four weeks. Dr. Hall has promised to use his influence to secure a

promotion for me while he is away, and it is rumored that Colonel Folsom is expected to command a regiment to be raised in Wyoming County, which, if true, may afford a chance of success.

July 30. The weather is very hot, and has so continued for several days, with no prospect of abatement at present. On the night of the 31st, the rebels opened their batteries from the south side of the river, attempting to disable our shipping at West-over, the lower landing. The gunboats soon replied, and after an hour or so silenced the enemy. The scene of the bursting of those immense shells in the middle of the night was grand, but no great damage was done to us.

August 3. We had rain which left the air cooler, and the health of the army begin to improve. Our regiment shows a smaller sick list by one-half than it did two weeks ago. This morning I report sixteen sick in hospital and twenty-seven in quarters, mostly cases of diarrhoea which is quite obstinate in character.

The attitude of the North in relation to the demand for more troops surprises us here in the army. There is very little use in teasing, or hiring, or buying soldiers to defend our country. Men must be had, and if they won't come voluntarily, they must be made to come. This Army, and Pope's, must be reinforced largely and speedily. Drafting must inevitably be resorted to sooner or later, and it might as well be done now as ever. It will never do to handle the rebellion with kid gloves, as there is very little Union sentiment remaining in the South, and we need have fear of injuring this supposed class by an aggressive warfare of the most unrelenting kind. These are some of the views entertained in the army at this time—views which are freely expressed on all hands.

August 6. The weather is hot again and our division is under orders to be ready to move at a moment's notice. The health of the regiment is very good at present and the sick list is daily diminishing. An Assistant Surgeon has been temporarily assigned to help me while Dr. Hall is away, which affords me some relief from the pressure of the routine duties. Captain Haines and Lieutenant Bull went home on sick leave today and Quartermaster Boyd went to Fort Monroe on business for the regiment.

August 9. I have been suffering considerably of late with pain in my front teeth, so much so, indeed, that my face is swollen quite badly. I have applied for leave to go to Baltimore and have them cared for by a dentist.

August 11. My face is better and my application for leave came back disapproved, which didn't surprise me much. (This

paper is among my war files, and contains some interesting autographs). Everything is packed up in camp ready to move, and we are sitting around upon the boxes waiting for the orders to start. The name of my assistant is Dr. Meekley, of Pennsylvania. General Davidson has been assigned to another command and will not return to us; he goes to St. Louis, I believe. Captain Heacock has gone home on recruiting service.

August 12. It is very hot and we are still waiting to move, expecting the order momentarily. Preparations are going on all around us, which indicate a movement of the whole army. We shall see.

August 13. We are still hourly expecting, living out of doors, as our tents and camp equipage are all packed and the wagons have moved off. This suspense is more trying than the labors of an active campaign. Captain Hamilton of the 33d returned from Richmond today and reports McLean, who was released with him, as off for Fort Monroe and probably the North. The weather is cooler, but I feel very much depressed in spirits—don't know why.

August 14. We are not off yet—waiting, waiting, waiting. McLean, much to our surprise, came to our camp (?) yesterday, and is now staying with his brother-in-law, Tom Dewey. General Smith has just returned from twenty days' leave spent in the North, and comes back a Major General, which we all think he deserves as much as any man. He has taken his division through some severe campaigning, and always skillfully, with little loss and no disaster. He is cool under fire, and altogether an ideal division commander.

ALEXANDER—POPE.

August 21. After six days hard marching we are at Hampton preparatory to embarkation, though we are unadvised as to our destination. The march down the Peninsula, especially that part of it between the camp we left at Harrison's and the Chickahominy, was so hot and dusty that we all looked like millers just out of duty in a flouring mill. The flies, too, perplexed us greatly the first day; so much so, indeed, that we were obliged to carry branches cut from trees to brush them off our horses, as well as ourselves. We passed over the old battle-field of Williamsburg and through the heavy works at Yorktown, places of familiar and historic interest. We embarked at Fort Monroe, Friday, August 22d, on the steamer C. Vanderbilt, and reached Alexandria Saturday evening, remaining on board all night and disembarking this morning (Sunday, August 24). The regiment was sent to camp about two miles out of Alexandria on the Fairfax Road, and I obtained a pass and took the boat for Wash-

ington. O. H. Dorrance, of Attica, a military telegraph operator, went with me, and we staid all night at the National Hotel. I had known Dorrance in my youth; he was a good companion, and we had a pleasant visit discussing the times of our boyhood days.

August 25. I returned to camp this morning and find that our horses have not yet arrived from the Peninsula. It looks as though we would be sent out to assist Pope who, I fear, is getting into some difficulty. On the boat coming from Fort Monroe to Alexandria I lost my baggage—a satchel containing my clothing and some valuable papers, including my rebel passes, etc.; so I busied myself Tuesday, the 26th, in replenishing my scanty wardrobe at Alexandria, buying, however, only such articles as I stood in immediate need of. Dr. Hall and Colonel Alberger returned from sick leave the 26th, both looking well, and Major Johnson has now forwarded his application for leave. We are located by the roadside between Forts Ellsworth and Lyon, and it is so dusty that we suffer considerably therefrom. As we are without horses we are obliged to stay in camp or go about on foot.

Friday, August 29. Franklin's corps, consisting of Smith's and Slocum's Divisions, was ordered to go to the scene of Pope's operations supposed to be somewhere near Manassas, and whose guns we had been hearing for a day or two. We were obliged to start without our horses, which was a serious inconvenience; but Dr. Hall and I kept up with the troops the first day, as the march was not a long one. We slept together that night under an apple tree in an orchard near our bivouac, without covering, save a borrowed blanket. Saturday morning we moved on early, but Dr. Hall and I were obliged to lag behind for a time. However, we soon found an ambulance going to the front, the driver of which was persuaded to give us a ride, thus enabling us to overtake the regiment Saturday evening between Centerville and the second Bull Run battle field, the closing scenes of which engagement were just then being enacted.

August 31. Sunday morning found us all back at Centerville, Pope and the Army of the Potomac as well, in the midst of a drenching rain, without any place to even sit down upon excepting the mud. We remained there until Monday night, when we fell back to Fairfax C. H. Monday P. M. A severe thunder storm set in, and I could find no shelter save the canvas covers of the artillery, and this was not safe on account of the danger from lightning. That night, after we reached Fairfax, I broke open a store and lay down upon the counter at

three o'clock A. M., sleeping until daylight. Tuesday, September 2, we remained near Fairfax, marching and counter-marching all day and at night returning to our former position near Fort Lyon, from which we set out five days before to join Pope. Our horses met us Wednesday morning just as we were approaching Alexandria again, so we had no use of them during this fatiguing but fruitless affair. To add to my discomfort I had on a pair of new boots when I left Alexandria and was, as a matter of course, tortured by them more or less during the whole trip.

THE MARYLAND CAMPAIGN—ANTIETAM.

September 4. Today McClellan is assigned to the defense of Washington, which brings us once more under his command. How long it will last or what next I cannot say; but, God be praised for delivering us from Pope. Dr. Jenkins reported to us as 2d Assistant Surgeon on the 5th. He had formerly been in the employ of Dr. Potter, of Cowlesville, and brought news of the people in that region.

September 6. Saturday, P. M., we crossed the Potomac over Long Bridge, marched through Washington and Georgetown out the Tennallytown Road, and bivouacked for the night near the latter village. This was the beginning of the Maryland Campaign, for news had now been circulated that the rebels had crossed into that state above Harper's Ferry. It was late in the evening when we passed through Washington, but the people were up to greet us and we were received with demonstrations of enthusiastic applause at almost every corner, especially at Willard's Hotel, where a large crowd had collected. The people evidently regarded the Army of the Potomac as their salvator and were grateful that it stood—a mighty barrier—between them and the rebel horde. As we passed General McClellan's residence we gave nine rousing cheers, which were taken up by each regiment as it passed. At a number of places during our passage through the city, I observed ladies supplying the soldiers with water, always so needful upon the march, and particularly in hot weather.

September 7. We lay in bivouac above Tenallytown until late Sunday P. M., and then set out towards Rockville, Md. Soon after starting we came to a stream, a small creek which I think was Rock Creek, where stood a carriage near the ford, in which sat President Lincoln, Mr. Seward, the Secretary of State, and Mr. Stanton, the Secretary of War. The soldiers cheered them lustily, and they all acknowledged the attention with bared heads and waving hats. We marched on by moon-

light until eleven o'clock P. M., when we again went into bivouac.

September 8. Monday was hot and dusty, and, though we did not start very early, we kept it up until late at night to make up. This was a good plan, for it enabled us to avoid the great heat of midday; and so through the week about after this fashion. On the 11th we bivouacked at Barnesville, and by Saturday, the 13th, we had reached Jefferson, where we again bivouacked for the night.

September 14. Sunday morning the sun rose bright, betokening a hot day, and after a hasty breakfast we started on the road to Crampton's Gap in the South Mountain, that was visible in the distance. We soon began to hear firing and see the smoke of battle at Turner's Gap, a few miles to our right; but the Sixth Corps was destined to engage in a battle of its own at Crampton's, later in the day. About noon we rested in a piece of woods and cooked coffee; Slocum's division being in advance, pushed on up to the Gap, we of Smith's soon following. Just at night we reached the foot of the mountain, when we were welcomed by a few shots from a battery belonging to Howell Cobb's brigade, stationed at its summit. The guns could not, fortunately, be depressed enough to get our range, so most of the projectiles passed over us without damage. It was quite dark by the time we were fairly ascending the mountain, and, hearing the groans of wounded men in the woods off the road, Dr. Hall and I dismounted and went to their relief. We found a number of rebels scattered through the woods, most of whom were wounded in the abdomen or chest, mortally. After ministering to them the best we could, we sought the regiment, which had passed on over the mountain, and was in bivouac on its western slope. We reached it late at night, tired and worn by the fatigues of the day, and slept soundly on the ground.

September 15. Monday morning the Sixth Corps was ordered to go to the succor of Harper's Ferry, but had not gone far before an order came, calling us back, that Post having already surrendered. We remained in camp near Rohrsersville during the balance of Monday and all day and night of Tuesday. Tuesday, the 16th, was the anniversary of our departure from Buffalo; what memories clustered around the day; what a year of camping, marching, and fighting we had seen—and the end was not yet. Dr. Hall and I visited the South Mountain battle field at Turner's Gap, on this Tuesday P. M. It was a beautiful day, and the scenery was something indescribably grand. Before us, looking east, was the Frederick Valley, with the city nestling in its midst a few miles away; behind us lay the Washington Valley,

equally picturesque, but where even now firing was going on between some of the contending forces, manoeuvring for position near the Sharpsburg field. Some of the enemy's yet unburied dead lay at our feet as we were sweeping the horizon with our and war. We reached our regiment in the early evening with glasses, and altogether it was a sadly beautiful picture of peace appetities for supper sharpened by its keen air, which we soon partook of and then lay down to sleep and rest, preparatory to the coming of the morrow with all its dreadful carnage.

September 17. Wednesday morning we awoke early and prepared to march, in the midst of a misty rain. I shaved myself while my tent was being struck, which is the last time my upper lip has felt the touch of a razor. We were off betimes, and soon passed through Rohrerstown en route to the Antietam field, which we reached about noon. The Sixth Corps was thrown in on the right to relieve Sumner, and the Third Brigade of Smith's Division, commanded by Colonel Irwin, 49th Pennsylvania Volunteers, made a charge on the enemy at the Dunker Church on the Hagerstown Road. (Illustrated in the *Century*, June, 1886, Page 298). Dr. W. J. H. White, Medical Director 6th Corps, was killed by a sharpshooter while sitting on his horse very near General Franklin—the first casualty in the Corps in this fight. The 49th lost two killed and twenty-one wounded; among the latter Lieutenant Colonel Alberger, struck in the face by a fragment of a shell. He was taken to the 2d Corps Hospital, as the Sixth Corps did not establish separate hospitals for itself, and I spent part of the day with him there on the 18th. During this day there was no fighting to speak of and everybody who could do so rested as much as possible.

September 19. The enemy retreated during the night of the 18th, and on Friday morning we found he had escaped to the other side of the river, where he stood at bay. I visited the famous "Sunken Road," where I saw the dead lying in swaths, and in the corn-field they were also thickly strewn; the number of dead bodies that I saw must, altogether, have aggregated near five hundred. I counted eleven dead near a caisson that fell into our hands. During the next few days we moved about considerably, but never very far at one time. On Sunday, the 21st, we marched to the vicinity of Williamsport, where our baggage came, so that night I enjoyed the luxury of a tent once more. On the 23d we moved about four miles down the Potomac and camped at Dam No. 4, to guard it, which is about half way between Williamsport and Sharpsburg. On the 22d I rode twelve miles to General McClellan's headquarters, to obtain Colonel Alberger's leave, and I brought it back with me duly approved;

so he went home rejoicing that his wound was no worse. These were bright days for us, for we felt the influence of the victory gained at Antietam; the weather, too, was pleasant, though the nights were cool. The old troops are very much worn in vigor, besides being poorly clad, and are particularly suffering for shoes. The country we are in is the finest we have seen in the South, resembling New York more in its thrift and enterprise; and under its genial sun the health and stamina of the army is improving. On the 27th, being still at Dam No. 4, we were reminded that it is just a year since we first crossed the Potomac into Virginia.

September 29. We are still at Dam No. 4, which is a longer time than we have been in any one place since we left Harrison's Landing. I am very short of money, having had no pay since July, and no prospect of getting any at present, as the government coffers are reported as nearly empty. Rumors are afloat that we go to Hagerstown soon, which I hope are true, for that is said to be a delightful region. Our mails are very irregular, sometimes a week apart, for which there seems no good reason. We are certainly in a more accessible region than Virginia, but we do not fare as well in regard to our mail facilities as we did there.

October 1. Today I attended the funeral of one of our men, the first that has died in camp since we left Camp Griffin. Others have died, but at the different hospitals where they have been sent. We were surprised by the receipt of a mail today, with letters from home to the 19th ult. Rain fell today, for the first time in many weeks, which was refreshing in every sense of the word.

October 3. Friday, we were reviewed by the President and General McClellan, which is the first review we have had since we were at Harrison's Landing. The Sixth Corps did itself credit as usual and the affair passed off pleasantly. We have a new Brigade commander in place of General Davidson, who, it will be remembered, left us at Harrison's Landing. Brigadier General Francis L. Vinton, nephew of the Rev. Dr. Vinton of New York, is our new General. He has just been promoted from Colonel of the 43d New York Volunteers, is a young looking man, but may do well.

October 8. We received fifty-four recruits from Buffalo today, which is a substantial and much needed addition to our wasted ranks. General McClellan's headquarters were moved to Harper's Ferry today, which is thought by some to indicate a forward movement soon. Major Johnson has been in command of the regiment since Colonel Alberger's wound; he is a cool, brave officer, but not generally popular. I like him very much

myself, for I know him well—probably better than any other officer, for he has no intimates. Tom Dewey was wounded in the heel at Antietam, but is on duty and is well.

October 10. We have just been surprised again with a mail, the first in ten days, which is a welcome change. Letters and papers from home are our great consolation, and when we are deprived of them so long it seems as if life were a blank. Mr. Woodruff, the sutler, has just arrived in camp, the first time he has been with us since Alexandria. We still remain quiet, having occupied this camp at Dam No. 4 about seventeen days. We are midway between Sharpsburg and Williamsport, and nine miles from Hagerstown, in the very garden of Maryland. Generals Franklin, Smith and Brooks have their wives with them at Hagerstown, which is a very pretty place according to report.

October 11. About one o'clock this morning Major Johnson came to my tent, saying we were ordered to move immediately. It was raining at the time and there was much mystery in the suddenness of the movement in the middle of the night, when we had not seen a rebel for nearly three weeks. However, we started at four o'clock A. M., and at nine passed through Hagerstown. We then learned that Stuart had made a raid around our rear, burnt stores at Chambersburg, and that we were being sent out to aid in intercepting him. But he was too nimble and fleet-footed for infantry, even eluding our cavalry and passing over the Potomac at Point of Rocks without interruption, after making the complete circuit of the Army of the Potomac for the second time in four months. Our services, therefore, being of no further use, we went into camp in a beautiful woods one mile and a half from the town, and on the 13th Dr. Hall and I visited the city for the first time. The nights were beginning to grow cool, and we, therefore, availed ourselves of this opportunity to purchase a small cast iron stove, which we brought home with us and set it up in our tent that night, having the first inside fire of the season. The popularity of the scheme was attested by our numerous visitors, not only this evening, but on various other occasions during the next few weeks.

The 3d Brigade has a brass band again, which is the only one in the division at present. The bands were all mustered out on the 1st of August and we have had no music since until now, excepting such as the fife and drum furnished. Tom Dewey has not been well for a day or two, but seems better this evening and sits by my fire enjoying its benefits and comforts.

October 15. Dr. Jenkins has been quite ill for the past week, and I imagine he is not over charmed with military life. A little sickness is apt to remove all illusions as to the delights of camp,

especially in an active campaign. Dr. Mulford has just returned from an absence of thirty days, having obtained his leave through the influence of Judge Levi C. Turner, of the War Department. He calls two or three times a day and is feeling quite happy.

October 18. The weather is beautiful—like Indian Summer—and today Dr. Mulford and I went into Hagerstown, where we saw the ladies promenading the streets, the shops busy, and all looked like civil life again. We also saw Mrs. General Franklin and Mrs. General Smith at the Sixth Corps Headquarters, where everything was gaily festive. General Slocum has been assigned to the command of General Banks's corps and General Couch has been ordered to Hancock, Md., today. Colonel Bidwell has returned to camp, having reported yesterday, and is looking quite thin for him. Today I was assigned to the medical charge of the 77th N. Y. Volunteers, as it was without a medical officer, the Surgeon and Assistant Surgeon both being away on sick leave. Tom Dewey has been ordered home on recruiting service, to relieve Captain Heacock, who has been absent sometime on that duty.

October 22. We moved in the night to Clear Spring, several miles towards Hancock, where we remained a week, guarding one of the dams or fords. While at Clear Spring about twenty officers boarded at the hotel there, which we enjoyed very much, as it was a pleasant change. We were all without money, but the landlord kindly trusted us until we should get our pay, the Quartermaster becoming responsible. I had charge of the 77th the week we were there. On the 29th we broke camp at three o'clock P. M., and moved to Williamsport, where we arrived at eleven o'clock at night, and remained during the 30th. Colonel Bidwell is with the 49th, but not on duty yet, as he is not feeling strong enough to assume command.

October 31. We moved from Williamsport to Boonsborough today, about twelve miles, where we arrived at noon, and then had our bi-monthly inspection and muster for pay. Mrs. General Pratt accompanied her husband on the march today and tonight they are at the U. S. Hotel in Boonsborough. Our brigade band is serenading them this evening, the weather being warm and the night delightful. General Pratt was formerly Colonel of the 31st New York, the regiment that Dr. Hamilton went out with as Surgeon. (General Pratt is now judge of one of the courts in Brooklyn, where he resides). We are ordered to move at six o'clock A. M. tomorrow, but whither bound we do not know—some say to Harper's Ferry, others to Frederick—but the morrow will tell.

November 2. We made a rapid and long march yesterday from Boonsborough to Petersville, passing through Turner's

Gap where Reno and Burnside had their battle on September 14, and then through Birkitsville, at the foot of Crampton's Gap, where Franklin's Sixth Corps was engaged the same day; but all evidences of the carnage had disappeared, save only the bullet marks on the trees and fences. We are two miles and a half from the Potomac, and six miles below Harper's Ferry. A hospital was established for the Sixth Corps at Hagerstown and we left 700 sick there. We expect to cross into Virginia tomorrow and then farewell to the delightful scenes of southwestern Maryland—My Maryland—where we have had so much of joy and sadness commingled. We have now been campaigning for eight months, which has worn us down in body and discouraged us in mind to a considerable degree, and I think we all dread going back into Virginia, where the old ground is evidently to be fought over again.

(Continued.)

New and Non-Official Remedies

Note.—This is a classified epitome of the report of the Council on Pharmacy and Chemistry of the A.M.A., descriptive of the articles accepted up to January 1, 1911. The first article in this series was published in our issue of October, 1911, and comprised new metallic compounds in which the metallic base itself is of therapeutic value.

SALICYLIC ACID COMPOUNDS.

Acid acetyl-salicylic (Aspirin). Claimed to pass stomach unchanged, to liberate salicylic acid gradually in intestine, hence to be relatively free from local and systemic by-effects. Dose 1-3—1 gram (5—15 grains).

Acid methylene citryl-salicylic. (Novaspirin) same claims.

Methyl benzoyl-salicylate (Benzosalin) same claims.

Succinyl disalicylic acid (Diaspirin) same claims.

Ethyl salicylate (Sal ethyl) analogous to methyl salicylate (oil of wintergreen) but less pungent.

Monoglycol salicylate (Spirosal) especially adapted to inunction, easily absorbed and not irritating. Full strength or diluted down to $\frac{1}{8}$ with alcohol, oil, ointment base, etc.

Naphthol salicylate (Betol). Unchanged in stomach, split up into components in intestine. Intestinal and urinary antiseptic. Dose 30—50 centigrams (5—7½ grains).

Phenocoll salicylate. Antipyretic and analgesic action of phenocoll combined with that of salicylic acid. 1—2 grams (15—30 grs.)

Pyramidon salicylate, similar. 50—75 centigrams (7½—12 grains).

Hexamethylamine salicylate (Saliformin) urinary antiseptic and uric acid solvent. 1-3—2 grams (5—30 grains).

Acetyl paramidophenol salicylate. (Salophen) similar to salol but not toxic. 1-3—1 grams (5—15 grains).

Antipyrine salicylate. (Salipyrin) 1-3—2 grams (5—30 grains).

Methyl-oxymethyl salicylate (Mesotan, Ericin) analogous to oil of wintergreen but more irritating. Used mainly locally, 50 per cent. in olive oil.

ANTIPYRINE COMPOUNDS AND ANALOGUES.

Antipyrine salicylate (see above).

Antipyrine mandelate (Tussol) combines sedative and antipyretic action of antipyrine with glandular secretory stimulation. Especially recommended in pertussis. 30—50 centigrams (5—7½ grains) with regard to age.

Antipyrine and ferric chlorid (Ferri or Ferropyrine) 1-3—1 gram (5—15 grains).

Antipyrine Chloralhydrate. 1—2 grams (15—30 grains).

Dimethyl-amino-antipyrine. (Pyramidon). Claimed to be safer and more lasting but slower than antipyrine. 30—40 centigrams (5—6 grains).

Pyramidon acid camphorate.

Pyramidon neutral camphorate ½—1 gram (7½—15 grains).

Pyramidon salicylate (see under salicylic acid compounds).

Guaicol salicylate (Guaicol Salol) 1 gram (15 grains).

CHORAL COMPOUNDS.

Chloralformamid U.S.P. (Chloralamid).

Antipyrine chloralhydrate see under Antipyrine.

Chlorbutanol, tri-chlor-tertiary butyl alcohol. (Chloretone) (Methaform) antiseptic, local anaesthetic, especially in dentistry (saturated aqueous solution). Hypnotic and sedative in sea sickness, etc. 1-3—1½ grams (5—22 grains).

Butyl (or Croton) Chloralhydrate. Less depressing and more analgesic than chloral. 1-3—1 1-3 grams (5—20 grains).

BROMINE COMPOUNDS.

Acetone-bromoform. (Brometone) 30 centigrams (5 grains).

(Bromipin) Brominized sesame oil. 4—32 c.c. (1 drachm to 1 ounce) of 10 per cent. solution, other strengths proportionately.

Bromo-mangan about 33 parts of bromine in 10,000, combined with ferro-mangan q. v.

Bromural is 2-monobrom-isovaleryl-urea 1-3 gram (5 grains).

Bornyl-brom-valerate (Brovalol) 25—75 centigrams (4—12 grains).

Ethyl bromid (general anaesthetic by inhalation).

Calcium dibrom-behenate (Sabromin) dosage as for potassium bromid.

IODINE COMPOUNDS.

Calcium mono-iodo-behenate (Sajodin) 1—3 grams (15—45 grains).

Iodalbin, compound of iodine and blood albumin, containing 21.5 per cent. of iodine, decomposed mainly in intestine. 30—60 centigrams (5—10 grains).

Iodipin, iodized sesame oil 2—6 c.c. of 25 per cent. solution (30—90 minims) hypodermatically.

Iodoformogen, iodoform-albumin, nearly odorless, applied full strength.

Iodomangan. About 15 parts of iodine in 10,000 combined with ferromangan q. v.

Iodine, per-iodid of phthalic anhydride. Employed in oil, ointment, etc.

Iothion, di-iodo-hydroxy-propane. Employed externally in 25—50 per cent. lanolin ointment.

Iodo-chlor-hydroxy-quinolin (Vioform) (Nioform), antiseptic, hemostatic, cicatrizant. Employed as dusting powder, ointment, suppository, etc.

Iodothyrene. 1 gram equals 1 gram of fresh gland and contains 3—10 milligrams of iodine. Used mainly as thyroid extract. $1\frac{1}{2}$ —2 grams ($7\frac{1}{2}$ —30 grains).

(Europhen) Di-iso-butyl-cresol-iodid. 20—30 centigrams (3—5 grains). Also externally as dusting powder, ointment, etc.

Thymol iodid U.S.P. (Aristol).

OXIDIZING COMPOUNDS ANALOGOUS TO HYDROGEN PEROXID.

Acetozone. Acetyl-benzoyl peroxid. 1:1000 of the powder (which is diluted 50 per cent. with an inert excipient). Drink ad lib. Also used in 1 per cent. mineral oil spray.

Succinic dioxid (Alphozone) used similarly.

(Perhydrol) 30 per cent. neutral solution of hydrogen peroxid.

Sodium perborate. Dusting powder or 2 per cent. solution. (Perogen, is sodium perborate mixed with a catalyzer, for preparation of oxygen baths).

Sodium peroxid. Not used internally. Mineral oil paste or soap used for acne, etc. (Oxone is sodium peroxid with a catalyzer).

Zinc peroxid used as dusting powder, ointment or soap.

CREOSOTE COMPOUNDS AND DERIVATIVES.

Anthrasol is a colorless coal tar, free from pyridin bases, etc., and mixed with juniper tar. Used externally, in ointment, etc.

Creosote carbonate (Creosotal) similar to creosote but claimed to be non-toxic and non-irritant.

Guaiacol coarbonate U.S.P. (Duotal).

Guaiacol benzoate (Benzosol) 20—60 centigrams (3—10 grains).

Guaiacol salicylate (Guaiacol-Salol) 1 gram (15 grains).

Glyceryl guaiacolate (Guaiamar) 1-3—1 1-3 grams (5—20 grains).

(Gujasanol) is diethyl-glycocol-guaiacol hydrochlorid. 1—3 grams (15—45 grains). Subcutaneously 3—4 grams (45—60 grains) in 20 per cent. aqueous solution. Also in 1-10—2 per cent. ointment.

Guaiacol methyl-glycolate (Monotal) externally, analgesic and antipyretic, 2—4 c.c. by inunction.

Guaiacol cinnamate (Styracol) especially recommended for tuberculosis 1 gram (15 grains).

Potassium guaiacol sulphonate (Thiocol) 1-3—1 1-3 grams (5—20 grains).

Ethylene-diamine-trikresol (Kresamine) externally, mainly as disinfectant 2 per cent.

SOCIETY PROCEEDINGS

Medical Society of the County of Erie

THE MEDICAL SOCIETY OF THE COUNTY OF ERIE, held a public meeting on October 16, 1911, at which Dr. Frederic C. Curtis spoke on Small Pox and Vaccination; and Dr. William A. Howe on Preventable Diseases. The former is Specialist in Dermatology, the latter Deputy Commissioner in the State Department of Health. The lectures were illustrated with stereopticon slides. The following representatives of the municipal and state departments of health discussed the subjects briefly: Drs. Francis E. Fronczak, William G. Bissell, W. S. Goodale, C. F. Durand, Edward Clark, Burt J. Maycock, John H. Pryor. The meeting was intended mainly for the education of the public, in view of the recent agitation against compulsory vaccination.

Dr. Fronczak made it very plain that he intended to enforce the law, both in letter and spirit, pointing out that people who believe the world to be flat, that the sun moves around the earth, and that vaccination does not protect against small pox must bow to competent authority. He considered the necessity of maintaining a municipal smallpox hospital a reflection on the intelligence of the city and dwelt upon the superiority of preventing smallpox, fires and the like, rather than of maintaining expensive plants for dealing with them when established. He mentioned the experience of Buffalo and other cities in dealing with small

pox epidemics and quoted Heman Spaulding, Chief of the Chicago Bureau of Contagious Diseases and Chairman of the A. M. A. committee on methods of control of small pox, that unless a community is thoroughly protected by vaccination, it is impossible to stop an epidemic within two years at the best.

Meeting of the Fifth District Branch of the New York State Medical Society

THE Oneida County Society entertained the Fifth District Branch of the State Society on Thursday, October 5, at the New Century Club Auditorium, corner of Genesee and Hopper Streets, Utica.

The meeting was held in the club auditorium, luncheon being served in the auditorium parlors.

New York and New England Association of Railway Surgeons

THE twenty-first annual session of the New York and New England Association of Railway Surgeons will be held at the Hotel Astor, New York City, on Thursday, November 16th, 1911. A very interesting and attractive program has been arranged. Railway surgeons, attorneys and officials and all members of the medical profession are cordially invited to attend.

DR. F. A. GOODWIN, President, Binghamton, N. Y.
DR. GEORGE CHAFFEE, Corresponding Secretary,
338 47th Street, Brooklyn, N. Y.

Buffalo Academy of Medicine

November 9, 1911.—Surgical Section, Construction and Mechanism of Moveable Joints, Dr. Gwilym G. Davis, Philadelphia.

November 14.—Medical Section, Normal and Pathologic Physiology of the Hypophysis, Dr. Joseph L. Miller of Chicago.

November 21.—Obstetric and Gynecologic Section, Merits of the Cautery in Radical Operation for Carcinoma of the Cervix, Dr. X. O. Werder, of Pittsburg.

November 28.—Pathologic Section, Present Status of Syphilis Research, Dr. Hideye Noguchi, of New York.

Double Red Cross at the Rochester Industrial Exposition

IN November, 1897, Captain Lomb expressed his love for children by founding the Rochester Public Health Association. For

the first ten years the work done was largely along educational lines, but, after incorporating in 1908, more time was given to practical work in Clinics. Until his death in 1908, Captain Lomb bore the expense of the Association almost unaided; but since then the people of the city have risen to the demands.

The system of medical inspection in schools, the visiting nurses, the school children's dispensary, Iola Sanatorium (Monroe County Tuberculosis Hospital) and the Open Air School, all have had their origin in this Association. The Open Air School is still a part of this organization, being conducted conjointly with the School Board. The work has grown so, that now there are five active clinics: one for ear, nose and throat; one for the eye; one for nervous diseases; one for orthopedic cases; and one called the general clinic, which is the clearing house in which the children receive a complete examination and are referred to the proper clinic for treatment.

The Rochester Dental Society conducts a free dental clinic in the Association Building. The work has reached such proportions, that it has become necessary to employ a trained worker, Doctor E. G. Whipple, formerly with the State Department of Health.

The booth at the Rochester Industrial Exposition is the first public effort made by the new secretary, to show the people of the city what the association is doing, rather than to present to them any educational exhibit. A letter and a folder with half tone cuts enclosed in an envelope marked "Exposition News" is being given out to the crowds of people who visit the exposition daily. Statements carefully printed in pronounced colors giving the various cases treated in the various clinics are tastily arranged along the walls of the booth and under these charts are representations of the various clinics. This booth has been designated as the official First Aid Station for the Exposition, and the nurses of the association are in constant attendance. The necessary medical supplies are kept on hand for emergency. The double red cross, the international emblem of the fight against tuberculosis, is the distinctive feature of the exhibit.

ABSTRACTS

Necessities for Labor Cases

1. List of articles to be carried in obstetric bag:
 Soap—P. D. & Co's. Germicidal Soap.
 New hand scrub brush—5c kind.
 Bottle bichloride tablets.
 Braided Chinese silk for cord.

Pocket case, needles and sutures.

Needle holder.

Fluid extract ergot and 1 ampoule ergotin for hypo. use.

Hypodermic syringe.

Absorbent cotton.

Ten per cent. sol. cocaine.

Forceps.

Small faradic battery, while not absolutely necessary, is often invaluable in cases of suspended animation.

Chloral in solution 10 grs. to teaspoonful.

Half dozen five-grain quinine capsules.

One gown and one pair rubber gloves.

Half ounce bottle ten per cent. solution silver nitrate.

One tube catgut.

2. List of articles to be provided by expectant mother :

Towels.

Chloroform, 4 oz.

Brandy, 2 oz.

Vinegar, 4 oz.

1 bottle antiseptic tablets.

Cake P. D. germicidal soap.

1 roll narrow tape.

1 new fountain syringe.

1 bed pan.

Six to nine dozen sterilized sanitary napkins, same as sold for traveler's use.

1 lb. absorbent cotton.

1 talcum powder can filled with mixture of 1 part salicylic acid and 4 of starch for drying cord.

Castile soap.

8 oz. tinct. green soap.

DR. S. MYERS, VICKSBURG., *Miss., Med. Mo.* Oct., 1911.

Failure of Development of the Corpus Callosum

La Salle Archambault fills the entire original department of the *Albany Medical Annals* for September, 1911, with an exhaustive treatise on Agnesia of the Corpus Callosum, illustrated with four full-page half tones and six cuts. His conclusions are as follows:

1. In cases of so-called agnesia of the corpus callosum, we have to do merely with an absence of the callosal commissure proper.

2. In a considerable number of cases, foetal hydrocephalus is the underlying cause of this anomaly. This lesion may act either by destroying a large part of the periventricular callosal

layer, or by determining ventricular symphysis which then interferes mechanically with the development of the callosal commissure.

3. The occipito-frontal fasciculus simply represents, as Sachs originally maintained, a heterotopy of the corpus callosum. It does not exist in the normal cerebrum.

4. The fornix is formed not only by fibres derived from the gyrus hippocampi but also by fibres which originate in the gyrus fornicatus and reach it by traversing the corpus callosum.

5. The internal sagittal layer of the fronto-parietal lobe, the reticular zone of Sachs, represents the corona radiata of the gyrus fornicatus or first limbic convolution.

6. The anterior commissure probably enters into the constitution of the temporal segment of the tapetum. Aside from this possible element, the tapetum is formed exclusively by the fibres of the corpus callosum.

Foreign Bodies in the Rectum

DR. T. L. HAZZARD of Pittsburg, at the Los Angeles meeting of the American Proctologic Society, reported the following cases:

1. Girl, two years old, nearly the whole of match fixed in rectum.

2. Boy, slightly older, bone of frog's leg similarly placed.

3. Adult male, 3-ounce Baltimore oval bottle, introduced from below; no questions asked as the patient would have lied.

4. Male aged 45; thin tumbler 2 inches in diameter at top, $3\frac{1}{2}$ high. (In regard to the first two cases, we may call attention to the fact, realized by few of the laity or even of the profession who have not used stool sieves considerably, that a large amount of foreign material is habitually ingested. We have obtained several chicken ribs from the passages of a supposed nursing; have seen large splinters of wood stuck in the rectum of persons who considered themselves careful eaters and who denied the possibility of introduction from below; while the frequency of finding large seeds, bone fragments, large masses of vegetable fibre and skin, labels, etc., renders it difficult to draw the line between indigestible edible residue and foreign bodies. Years ago, in the museum of Harvard, we wondered at the carelessness of the attendants in leaving a label without a specimen, and at the parsimony of so rich an institution in using a large catsup bottle as a container, until it gradually dawned upon us that the bottle itself was the specimen.—Editor)

BUBONIC PLAGUE.—J. Campbell MacDiarmid and J. Howard Lawry, *New Zealand Medical Journal*, August, 1911, report seven cases of plague at the Auckland Hospital. Five were bubonic,

all recovering. Two were pneumonic, one recovering, one dying. The non-fatal case occurred in the nurse who took care of the other and was apparently primarily a respiratory infection. However, the first manifestation was an acute nephritis, the bacilli not being found in the sputum till the seventh day. The treatment was mainly symptomatic, strychnine or quinine being used as a stimulant, the buboes being treated by hot and cold applications in different cases, preference being given to 10 per cent. aqueous solution of ichthyol, with frequent change of dressings, and hydrogen peroxid for sloughs. The average stay in the hospital was forty-nine days.

THE September number of "*Surgery, Gynecology and Obstetrics*," contains a symposium on the relative merits of suprapubic and perineal prostatectomy, composed of papers read before The Urological Society, by Hugh Young, Bentley Squier, William Belfield and Parker Symms. Squier defends the suprapubic method and describes an original technic in which the bladder is opened as high up as possible and the gland enucleated through an opening in the roof of the prostatic urethra. He also demonstrates that the external sphincter surrounds the intravesical mass, photographs showing the groove upon the enucleated organ caused by its compression. The technic of enucleation is illustrated by excellent diagrams.

Young describes his well known technic and mentions the use of his median bar punch as well as quoting statistics of several hundred operations.

Belfield emphasizes the point that the urethra should be opened just behind the external sphincter. Symms insists that the finger must be swept around the internal sphincter to be sure that there are no intravesical projections. All of the papers emphasize the necessity of careful preparatory treatment.

NICKEL SULPHATE.—Louis Kolipinski of Washington, *Monthly Cyclopaedia and Medical Bulletin*, June 1911, states that the first medicinal use of nickel was by J. Y. Simpson in 1853, as a general tonic. Nickel does not seem to be toxic as a base—negative results from use of cooking utensils, feeding experiments, etc.—but its soluble salts are irritant, producing nausea, vomiting, diarrhoea, giddiness, pulse depression in a dose of 1-3 gram or thereabouts. The average adult dose of the sulphate is about 1 grain, various authorities having established a safe range of 3—10 or 15 centigrams. The therapeutic value of nickel may be summed up as a safe substitute for arsenic—a general tonic and nervine, hence useful in migraine, urticaria, chronic psoriasis, chorea, stammering, tic douloureux, masturbation and various other neurotic sexual disturbances.

PELLAGRA.—Dr. George C. Mizell of Atlanta, *Journal-Record of Medicine*, September, 1911, continues his contention that pellagra is due to the excessive use of cotton seed and other non-drying oils. We must not overlook the fact that cotton seed oil is a valuable nutrient. At the same time, it is possible that Mizell has hit upon the true explanation of pellagra or has at least afforded a hint worth careful investigation. In this, as in other dietetic problems, it must be remembered that the proper balancing of a ration, is of the utmost importance. His article, at any rate, contains a great deal of interesting statistic matter regarding the prevalence of pellagra, the kinds of non-drying oils available in different parts of the world and the economic uses of cotton seed and its derivatives.

THE Relation of Vaccine Therapy to the Treatment of Certain Diseases of the Skin, D. King Smith. (*Jour. Cutan. Dis.*, Aug. 1911).

Acne cases are divided into three classes:

- A. Those due to the Acne bacillus.
- B. To Acne bacillus and Staphylococcus Albus.
- C. To Staphylococcus Albus.

In Class "A"—cases with comedones, papules and papulopustules—a vaccine of the acne bacillus was used; dose 5 millions twice weekly. Results were unsatisfactory but in connection with general and local treatment, Dr. Smith considers the vaccine useful.

In Class "B,"—cases with papulopustules and pustules—a mixed virus, of 5 millions of Acne bacilli and 10 millions of the Albus, was employed with fifty per cent. of success.

In Class "C,"—cases with deep-seated pustules and much scarring—the Staphylococcus Albus in dose of 10 millions was given with excellent results.

In Furunculosis a vaccine composed of the Staphylococcus Aureus, Albus and Citreus, dose 125 millions twice weekly for three or four weeks gave good results in ninety per cent. of the cases. Similar results were obtained in carbuncles.

In Coccogenic Sycosis, 125 millions of the Albus, twice a week, produced good results, notably in acute cases.

In Erysipelas brilliant results were obtained by the use of a composite stock virus of devitalized streptococci derived from several different strains, with a first dose of 250 millions in severe cases and 5 millions if less severe. If there are signs of improvement, the dose is repeated the following day, the general rule being: "The more severe the case and the less satisfactory the clinical response, the smaller the dose."

In Eczema of the squamous type excellent results were obtained from the Albus vaccine.

A MEANS OF CONTROLLING THE HEMORRHAGE FROM INOPERABLE NEOPLASMS OF THE BLADDER: WITH CASES ILLUSTRATING THE TRYPSIN AND HODENPYL-SERUM THERAPY.—L. Bolton Bangs, New York, states that one can relieve the hemorrhage from tumors of the bladder, which are a cause of great apprehension to the patient, by the use of a solution of creolin injected into the bladder. Creolin is an antiseptic with hemostatic properties. The author gives the histories of four cases in which it was used with benefit. A 1 per cent. solution is found to be efficient for this purpose. It relieves irritability of the bladder at the same time that it reduces the loss of blood, and in some cases it reduces the size of the tumor. The author has found no value in the use of ascitic serum or of trypsin in cases of cancer of the bladder. In one case the Hodenpyl serum was used persistently for a long period without any apparent benefit. Although there is no permanent cure to be hoped for by the use of the creolin treatment, still the life of the patient is made more comfortable and often prolonged considerably.—*Medical Record*, August 19, 1911.

PARALYSIS OF THE UPPER EXTREMITY DUE TO NERVE INJURIES.—Nathan Jacobson, Syracuse, N. Y., presents the histories of several cases of nerve injuries of the upper extremity with remarks on the diagnosis and treatment. The most frequent cause of partial paralysis of the upper extremity is injury of the musculospiral nerve; this occurs especially in fractures of the humerus, the nerve being torn at the time of the accident, or becoming compressed, or adherent to the callus in the process of repair. The nerve can also be injured at a lower point, in the lower third of the arm in fractures. The injury is not always recognized at the time of the fracture but appears when the splints are removed, with the characteristic wrist-drop and inability to extend the fingers. In two of the cases presented the nerve was adherent to the callus and separation of the nerve from the cicatrix brought about entire recovery. When there are visible changes in the nerve as a result of injury recovery is slow. A case of fracture of the neck of the scapula with displacement of the head of the bone and adhesions to the brachial plexus caused complete paralysis of sensation and motion. No apparent injury of the nerve occurred and a few days after operation motion began to return and recovery ensued. When there is complete division of the nerve trunk we have a different condition entirely. In such a

case after uniting the nerve-ends six months after the injury good results were obtained; sensation was completely restored, and many muscular movements have returned. If a nerve is reunited soon after injury the immediate results are not better than after remote operation. If suppuration has occurred in the wound with granulation one will not get restoration of function without operation.—*Medical Record*, August 19, 1911.

RECOLLECTIONS OF CHOLERA EPIDEMICS IN RUSSIA.—G. A. Friedman, New York, presents recollections of his service as sanitary physician in the cholera barracks near St. Petersburg in 1894. A novice in this work, the author recognized that there were numerous cases of ordinary diarrhea, and soon the epidemic began. The occurrence of many cases of diarrhea in any place exposed to cholera should lead a physician to suspect the beginning of an epidemic. Persons suffering from gastrointestinal disorders are predisposed to cholera. Mouth infection is the most important source of the disease. Cholera appears frequently among priests after funerals in Russia, where custom causes them to partake of food and drink in the infected house after the funeral. Alcohol, a fasting stomach, and cholera phobia are predisposing causes. Bacteriological examinations are important early in the disease. Later the picture is striking; profuse diarrhea, rice-water stools, vomiting, muscular cramps, hoarse voice, and anuria are present. The author found hot baths of use in the algid stage. Salol, followed by naphthalin and benzo-naphthol, was used to control diarrhea. Opium is not to be used.—*Medical Record*, August 19, 1911.

CHEMICAL AND BIOLOGICAL AIDS IN THE EARLY DIAGNOSIS OF GASTRIC CANCER.—A. E. Austin, Boston, Mass., states that when patients are operated on before there is extensive stasis it is found that free hydrochloric acid is present in many cases. Positive hemolysis was found in 22 out of 26 cases of gastric cancer, while it was present but once in 60 noncarcinomatous cases of gastric trouble. When pepsin is found in marked amounts in the urine and there is little or none in gastric contents this points to gastric cancer. The presence of tryptophan in gastric contents is an indication of gastric cancer. The bromine test of stomach contents will give a violet color in the presence of tryptophan. In a series of cases tested by the author this test was negative in 20 cases out of 22, and one of these showed a palpable tumor. The tryptophan test is considered by the author the most available test for cancer that can be used in a clinic.—*Medical Record*, August 19, 1911.

TOPICS OF PUBLIC INTEREST

Proposed List of Important Medicaments

THE Council on Pharmacy and Chemistry of the A. M. A. has issued a circular letter to teachers of materia medica and therapeutics and members of examining boards, with a view to establishing a list of medicaments of real importance, to which examinations for license shall be confined. The ultimate object is to economize mental effort. A great deal of the anxiety of students is, rightly or wrongly, due to an impression that they must anticipate the hobbies of a particular examiner and that certain examiners will go out of their way to find an ancient herb, little used at present, with which to catch the unwary aspirant for a license.

We confess to a certain degree of sympathy with the student. We are quite certain, for example, that a favorite formula of Dr. Goodell's of which he naively said, hundreds of pills were used by his patients every spring, would have been denounced as an incompatibility by Dr. Wood. And we recollect a bit of faculty gossip to the effect that a famous surgeon told of the extreme ignorance of a student in regarding a cataract as fatty degeneration; whereupon the pathologist exclaimed "Why, John, that's what I taught him."

At any rate, there can be no dispute but that if the materia medica were printed in three books and if some Sibyl could burn two of them she would be justified in charging a far greater price for the remaining one than for the original three—always provided that the proper selection had been made. Let it be distinctly understood, however that we are thinking not primarily of the student's peace of mind and not at all of sparing him labor on materia medica and therapeutics. What interests us is the true economy of labor in developing a thorough knowledge of the use of drugs by concentrating on those essential and really valuable.

There is a fallacy, quite wide-spread, that one can practice medicine with ten or twenty drugs. To any one who holds this notion, we merely say, make a list of the armamentarium on hand in the office: alcohol, water, hydrogen peroxid, ether, chloroform, formaldehyd, ammonia, etc., etc., amounting to perhaps 50; count the contents of the hypodermic and emergency medical case, look over a year's file of favorite prescriptions. Even for a specialist, unless his work is extremely limited and mechanical, the list of drugs will easily reach a hundred. Still, unless a physician is continually reaching out for novelties and striving to be "original," he will probably not exceed 500 different drugs and, while

the list will naturally change to correspond to improvements in the available supply, it may be considered that this number represents a full requirement for a license to practice.

It would seem a very simple matter to secure, from teachers and practitioners, a satisfactory list of useful and necessary drugs. But there is a surprising lack of unanimity of opinion when one passes the first hundred or so of drugs in almost universal use. For example,—and it should be understood that we resort to personal statements solely as an example—the writer would be willing to dispense with the entire list of opium preparations except one salt of morphine and of codeine, with physostigma and its derivatives and with many other standard favorites, yet he would plead for catnip, apocynum and dioscorea. A friend who has Long taught therapeutics and has been interested in the work of state boards and colleges, informs us that precisely such foolish notions are common among the very men who might be supposed to be in a position to choose most wisely from the vast array of the *materia medica*.

Neither does it seem that the choice can be limited to the *Pharmacopoeia*. However loyal we may be to official standards and however faithfully we may essay to follow the trite mixtures and shotgun formulae of the National Formulary—not overlooking its many sensible prescriptions—the great majority of us will, at the bed side, find occasion to prescribe many new chemic compounds, occasionally a discarded “time-honored” legacy from a few centuries ago, an ethical proprietary, and, once in a while, a preparation that we deride when on our feet at a medical meeting.

All things considered, it seems that the best compromise is to let each teacher use his own judgment but to limit formal examinations, especially for license, to an unquestioned list of indispensable drugs, listed in the *Pharmacopoeia*.

THE HYGIENIC CRUSADE OF THE INTERNATIONAL TYPOGRAPHICAL UNION.—Persons not directly concerned with labor in the narrow sense that it has come to have in the last few years, are inclined to think that a Union exists only to secure higher wages—which in the aggregate mean dollars of lower value—and fewer hours of labor. While this criticism may be somewhat justified in certain cases, the fact should not be overlooked that the chief objects of a labor organization should be to secure increased efficiency of labor and a betterment of social and hygienic conditions which react to the benefit of the community at large.

The International Typographical Union has advised and enforced many reforms along hygienic lines, destined not only to benefit its members by reducing the risk from tuberculosis, lead

poisoning, and occupational disease generally, but employers by increasing the efficiency of labor and the whole country by the force of a good example. One of the most noteworthy of the achievements of this Union is the establishment of a Home at Colorado Springs, dating from 1892, originally intended for the aged and infirm, more recently developed by the addition of appropriate buildings, into a tuberculosis sanitarium.

By a substantial pension system, "It is the boast of the International Typographical Union that its members do not become public charges." The mental training and technical skill of printers brings them well within the average of many so-called professions and it is not surprising that they have manifested so broad and farsighted an intelligence. Visitors will be welcomed at the Home and guides will be furnished. We hope that any of our readers anticipating a trip to Colorado, will avail themselves of this invitation.

The Commission Business

THE *New Zealand Medical Journal*, Aug. 1911, resumes a discussion started in November, as to the propriety of physicians' occupying rooms in connection with drug stores (chemists' shops in the original.) While the editor sagely remarks that such contiguity does not necessarily mean that the druggist acts as a tout for the physician and that this unethical practice may exist between a druggist and a physician not on the same premises, he plainly implies that it is well to avoid even the appearance of evil.

It seems, however, that New Zealand has already dealt radically with the secret commission evil, having "An Act for the Prohibition of Secret Commissions."

"Clause 8.—Every person is guilty of an offence who advises any person to enter into a contract with a third person, and receives or agrees to receive from that third person, without the knowledge and consent of the person so advised, any gift or consideration as an inducement or reward for the giving of that advice, unless the person giving that advice was to the knowledge of the person so advised the agent of that third person."

Here is a practical, legal remedy, not only for medical fee splitting, but for toutting of all kinds, in any line of business. Can we do better than copy this law in our own country?

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

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No. 4

The Crusade Against Abortionists

IT is from no neglect of medical news that we have ignored various press items on this subject. We feel that, until definite judicial decisions have been reached, it would be an injustice to the physicians charged with the crime of abortion or its attempt, to bring them into further notoriety. We can neither defend nor condemn until all the evidence has been weighed by an impartial court and a legal decision reached. Merely to mention a charge, may bring into question the reputation of an innocent man, among his professional brethren at a distance, who may fail to see the final notice of his acquittal.

We have much sympathy with a few members of the profession, who feel that their attempt to make prospective parents realize that abortion is murder, has been wasted on hired detectives. We can appreciate their indignation but, on the other hand, they as well as others should realize that the officials of the Medical Society of the County of Erie, are dealing with a vital problem and are trying to prevent a crime whose detection in genuine cases, is well nigh impossible. In this attempt, they must use such measures as afforded a reasonable chance of securing convictions, and must employ such agents as are available. It is better to detect promptly the man who is willing to perform a criminal abortion and to punish him on the lighter charge of intent and attempt, than to wait till he has destroyed dozens, perhaps hundreds of human lives in embryo and to convict him

when, to these crimes, he has added death or serious illness of an adult woman.

We also agree most heartily with the opinion voiced by some critics, that the committee should "hew to the line, let the chips fall where they will." We do not agree with the insinuation that the men who are bearing the brunt of the labor of this thankless but very necessary task, are actuated by personal spite or are deliberately ignoring clues to influential, pious and respectable hypocrites. If any critic has good reason to believe that men of prominence in the profession are engaged in the abortion business, let him make his charges in such a way as to lead to action.

There is one further fact that must not be forgotten. An abortion, spontaneous or started in whatever way and by whatever means, is a serious medico-surgical case, requiring prompt attention by a skilled physician and having the utmost claim to professional secrecy. This should be borne in mind, both to secure an impartial attitude toward the men accused of crime and lest in the fear of a trap, other men refuse the assistance which humanity demands. But we would call attention to a well established ethical principle: that, except in the gravest emergency, foetal life should not be sacrificed without council. When for any reason, this is impossible, it would be a wise precaution to lay the facts before some reputable confrere as soon as possible, and to secure his collaboration and sharing of responsibility in the further conduct of the case.

Refilling Prescriptions

THE National Association of Retail Druggists, at its meeting at Niagara Falls in September, 1911, discussed this subject at length and finally decided to honor a written order not to refill a prescription but to pay no attention to instructions to this effect, printed upon a prescription blank.

In our opinion, the only thoroughly satisfactory conception of a prescription is in analogy with a bank check; namely, that it is an order to pass out to a certain individual or his authorized representative, a definite amount at a given time. We do not see why a patient should keep a prescription and have it refilled whenever he chooses or pass it on to his friends, in the original or by copy, and have them collect it, whenever they choose, any more than a check should be similarly treated. It certainly is convenient—and cheap—to refill a prescription indefinitely. It would be exceedingly convenient if we could use checks in the

same way. Nor do we see why it should be necessary to mark a prescription not to be repeated, any more than a check.

However, it is some satisfaction to know that some definite action has been taken by the pharmaceutical profession and, after all, it often is convenient to order a prescription repeated verbally. And we must not forget that, from the business standpoint, the free access of the laity to drugs, singly or combined, does the physician about as much harm as the artist would suffer if the public could get hold of his paints and brushes and thus compete with the professional painter.

Wool or Cotton?

THE season is here when the physician is called upon for advice—or may find the way to offer it unasked—as to clothing. From ancient times, woollen has been the accepted fabric for winter undergarments and it is only recently that red has lost its favor as both literally and symbolically superior in warmth. However, woollen and cotton garments placed in a tub, behave in such a way as to suggest that heresy may go a step further and relegate the former to the past. If wool will not except with difficulty, absorb water from a tub, how can it absorb perspiration? And, while a warm, sweaty body gives the subjective impression of conservation of heat, it is to be seriously questioned whether exposure to external cold while the body is coated with perspiration, will not produce chill. On the other hand, cotton or linen underwear, of heavy weight, will absorb a considerable amount of water, allow it to evaporate gradually and thus keep the skin dry.

So much for theory. As to the practical side, we can only give, for what it is worth, four years of comfort in cotton garments and a half day of suffering from cold feet on account of a temporary return to woollen socks.

We are inclined to believe, however, that old persons, with relatively inactive skins and not liable to prolonged outdoor exposure after perspiring, might better wear woollen.

It is a curious fact that laborers frequently wear in summer as heavy undergarments as professional and business men wear in winter. We have never been able to appreciate their philosophy. Within the last generation, the woman who wore summer underwear the year around, seems to have given place to a more sensible type. But we can't help wondering what the girls who have been wearing winter cloth coats this summer, will do in December. Will there be a rise in incidence of catarrhal troubles?

Our Impatient Bacteriologist

MAJOR WILLIAM G. BISSELL, City Bacteriologist of Buffalo, in the first test of the filters installed in the public schools has found them unsatisfactory. Representatives of the manufacturers claim that the test was unfair as they had no notice of the date at which the test was to be made and no chance to prepare for it. This claim is admitted. The water, by the way, had a higher bacterial count after than before filtration. We would suggest that sufficient notice should be given those interested in the filters so that they could have them sterilized in advance of the test and that the water pipes should be tapped so as to run a supply of boiled water through them into the filters. The result would then be available as an advertisement. As to the children of three grammar schools and three high schools that drink the water in the mean time—well, that is another matter.

Journal Announcements

PROGRESS.—Eight pages are added to the JOURNAL, beginning with the present issue, mainly to accommodate new advertisements and miscellany. The Original and Abstract Departments will be enlarged soon. The circulation has been increased about 350. Excepting on account of death, there have been only two discontinuances, one by a doctor of over fifty years' practice, who has retired, the other by one who discontinued paying for his JOURNAL some years ago. We appreciate very much the promptness with which subscribers have remitted and the friendly interest manifested in contributing articles, securing new subscribers and in various other ways. Just a word as to the change of staff, to afford local centers for securing news notes, original articles, etc. In welcoming these Associates, we wish to avoid the impression of having used a new broom too vigorously. With one exception, the members of the previous staff who have resigned, had not been in active service for some time, owing to retirement from practice, removal from Buffalo and pressure of practice. For the last reason, the one exception is accounted for but we have the promise of an occasional article from his forcible pen and, indeed, the other members of the previous staff have all promised their support in one way or another.

PREMIUMS.—The BUFFALO MEDICAL JOURNAL does not offer premiums of any kind, mainly for the reason that, if they are of any value, a discrimination is made against old subscribers. We shall be glad, at any time, to afford to any subscriber, whatever advantage belong to the premium system, in regard to securing books, office supplies, etc. Back numbers of the JOURNAL will be supplied

free to subscribers, to complete files. We have a few copies of the Transactions of the Medical Society of the State of New York and a set of Foster's Encyclopædic Medical Dictionary for which a nominal price will be charged.

EXPECTED ARTICLES.—Beside the articles previously announced, we expect to publish, during the winter, one from Dr. Louis Faugere Bishop of New York, and one from Sir William Osler, Regius Professor of Medicine, Oxford, England, as well as a number of interesting papers from men in our own territory. Dr. Osler writes under date of September 18, "Dear Benedict:

I am very glad indeed to hear that you are in charge of the **BUFFALO MEDICAL JOURNAL**, for which I have always had an affection, a good deal, I must say, from the appreciation I had of the splendid men who were its founders and it is a journal, too, that has, all along, done good work."

OUR CONTEMPORARIES

THE *Practical Medicine*, edited by Ram Narain Mathur and published at Delhi, India, is one of our interesting exchanges that must be a blessing to a home-sick American doctor. The editor abstracts extensively from American journals, publishes original articles from an occasional American contributor and even the advertisements remind us of home.

DR. HENRY R. HARROWER, of Chicago, editor of *Physiologic Therapeutics*, published bi-monthly, has recently filled in the chinks with another bi-monthly, named *Successful Medicine*. This will be devoted to the business aspects of medical practice and, like Harrower's other undertakings, will be itself successful because of its merit.

WHAT others think of us. The *Maryland Medical Journal* for October reprints, with due acknowledgement, from our September issue, "The Control Experiment and the Enthusiasts," "Quality, not Quantity in Medical Education" and "The Splitting of Fees." The first and last were contributed articles. The *Journal of Ophthalmology and Oto-laryngology* has asked permission to reprint Dr. F. Parke Lewis's article, from the same issue—a permission granted with pleasure.

THE *Buffalo Commercial* celebrated its hundredth anniversary in October, with a large, well illustrated edition of unusual interest.

PERSONAL

DR. JAMES H. GLASS of Utica, has purchased 200 acres in Herkimer Co., on the east side of West Canada Creek, at Trenton Falls.

DR. SMITH BAKER of Utica has an article in the *Popular Science Monthly* on the Significance of Abdominal Pain.

DR. J. G. KILBOURN of Utica entertained the staff of St. Luke's Hospital and a few other local physicians at his summer home in the outskirts of New Hartford, on September 23, 1911. Trap and rifle shooting, a base ball game and a clam bake occupied the afternoon and evening.

DR. CHARLES E. FLAGG of Buffalo spent part of September at the Lake of Bays, Ontario.

DR. JESSE E. LEVY of Buffalo had a night call, October 1, from a couple of burglars. They showed presence of mind, on being detected, by claiming to be sick but, as they were trying to enter by the window instead of the door, Dr. Levy declined to consider the call of a professional nature.

DR. CHARLES A. BROWNELL and Dr. F. S. Hoffman of Buffalo, returned about the middle of October from the Bermudas.

DR. EDWARD E. HALEY, of Buffalo, Chairman of the Committee on Contract Practice of the Medical Society of the County of Erie, himself entered into a life contract on October 3, 1911. Our congratulation and best wishes.

DR. HERBERT B. SMITH of Corning and Dr. Ira Goff of Howard, are the Republican candidates for coroners of Steuben County.

DR. WILLIAM GAERTNER of Buffalo, is the Democratic candidate for Superintendent of Education of the City of Buffalo, in opposition to Henry P. Emerson, LL.D., who has occupied the position for nearly twenty years. The editor was a pupil of the latter, a

teacher of the former. Both are splendid men, both have been professional teachers, in high schools. We are glad that a medical journal does not have to take sides in a political issue.

DR. MAUD J. FRYE has returned from Europe.

DR. B. D. SHEDD of Arcade, spent part of October in the Adirondacks, hunting deer.

DR. ALEXANDER HUGH FERGUSON of Chicago, announces a partnership with his former first assistant, Dr. James J. Monahan, with offices in the Reliance Building, 32 N. State St. Chicago.

DR. L. DUNCAN BULKLEY will give the thirteenth series of Clinical Lectures on Diseases of the Skin at the New York Skin and Cancer Hospital, Second Avenue and 19th Street, New York City, Wednesdays, November 1 to December 20, 1911, at 4.15 P. M. The course is free to members of the medical profession.

DR. GEORGE A. HIMMELSBACH of Buffalo has returned from Europe.

THE Medical Society of the County of Steuben held its 94th fall meeting at Corning, October 10, 1911, electing Dr. John L. Miller of Corning, President; Dr. J. A. Conway of Hornell, Vice-President and re-electing Dr. W. W. Smith of Avoca, Secretary and Treasurer.

DR. HOWARD A. KELLY, of Baltimore, Md., and Ahmic Lake, Ont., had to break in upon his recent vacation and have a troublesome chole cystitis treated surgically. He has made an excellent recovery.

DR. HERMAN E. HAYD of Buffalo, has returned from the meeting of the American Association of Obstetricians and Gynecologists, of which he has been President.

DR. JULIUS T. COHEN of Buffalo, has returned from Europe.

DR. W. A. SCOTT of Niagara Falls, has been renominated by the Republicans for a fourth term as Coroner of Niagara County.

DR. W. G. GROVE of Buffalo, spent several months last summer touring the British Islands and western Europe.

DR. BERNARD F. DENNIS, after four years of European study, has opened an office at 520 Franklin St., Buffalo, for the practice of surgery, having especially qualified for cystoscopy, etc.

OBITUARY

DR. GEORGE WILLIAM REYNOLDS, a graduate of the University of Buffalo, 1880, Chief of the gynecologic staff, St. Joseph Hospital, Chicago, died in that institution, September 9, 1911, aged 57, of chronic interstitial nephritis.

DR. JOHN N. JONES, University of Buffalo 1898, twice coroner of Chemung Co., N. Y., died at Erin, September 5, aged 38.

DR. BENJAMIN WILSON, P. & S., 1863, surgeon of U. S. Volunteers during Civil War, died at Rochester, August 13, aged 71.

Brigadier General Charles Ravenscroft Greenleaf, Medical College of Ohio, 1860, a military surgeon from the outbreak of the Civil War, through the Spanish American War, and till his retirement in 1902, died in San Jose, Cal., September 3, 1911, aged 73. He was a surgeon and executive of ability, a writer of note, especially on military topics.

DR. HENRY HERBERT HERBST, University of Pennsylvania, 1884, ex-mayor of Allentown, a member of the A.M.A., American Academy of Medicine, a man who had held many positions of honor and who was a pioneer in the medical inspection of school children, died of nephritis, at the University Hospital, Philadelphia, September 20, 1911, aged 53.

Dr. Hiram Gettman Du Bois, University of Buffalo, 1866, once president and twice vice-president of the Medical Society of the County of Oneida, died at Camden, September 19, 1911, of cerebral hemorrhage.

DR. THOMAS DWIGHT, the successor of Dr. Oliver Wendell Holmes, in the Parkman professorship of anatomy at Harvard,

died September 8, 1911. While Dr. Holmes was noted for his ready wit—though it was always of a kindly and instructive nature—Dr. Dwight was a strict disciplinarian and never permitted levity in his classes.

DR. SAMUEL S. KILVINGTON, University of Buffalo, 1883, died at Minnetonka Mills, Minn., of cerebral hemorrhage, on September 25, 1911, aged 69.

DR. FREDERICK G. TROWBRIDGE, a classmate of the former, died at Watertown, N. Y., of the same cause, September 20, 1911, aged 53.

THE Erie County Hospital staff, at its regular meeting, September 18, 1911, passed memorial resolutions on the deaths of Drs. W. C. Phelps and Alvin A. Hubbell.

COLLEGE AND HOSPITAL NOTES

THE 66th annual session of the University of Buffalo, Medical Department, opened on Monday, September 25. Following the time-honored custom, the regular work of the year was introduced by a lecture upon some general topic, which was delivered on this occasion by Dr. Edward R. McGuire. Dr. McGuire struck into a somewhat original vein in reading a biographic sketch of John Hunter. His treatment of the subject was very happy showing how much there was in the life in this great man to stimulate his successors to industry and exact observation.

The Medical Department has a larger freshman class than it has had for several years; more than eighty students although the entrance requirements are more severe than they have ever been before, as inorganic chemistry is one of the subjects required for entrance. In this respect, the Buffalo school is in advance of the requirements of the New York State Board of Regents.

BOOKS AND AUTHORS

A **Pocket Medical Dictionary**, George M. Gould, A.M., M.D., Ithaca, N. Y.; sixth edition, 34,000 words, P. Blakiston's Son & Co., Philadelphia. \$1.00.

This handy little limp-leather pocket companion has been so favorably known in its earlier editions, that it is scarcely neces-

sary to do more than mention the fact that a new edition has been required, by the exhaustion of older ones. Words are the pegs on which thoughts are hung. The student or physician who lets an unknown word pass him, throws a cloud over his understanding of an entire subject. Looking back over our first year of medical study, we recall that it was largely devoted to learning the meaning of new words. At the time, it seemed that nothing was really learned of medicine but, later, it was appreciated that merely the dictionary—and in those days, a convenient companion like the present, was practically unknown—had laid a good foundation for later courses.

Cesare Lombroso, A Modern Man of Science, Hans Kurella, M.D., translated from the German by **M. Eden Paul, M.D.;** published by the Rebman Co., New York, 1911. 194 pages including index, \$1.50 cloth.

This is not merely a biography but rather a review of Lombroso's scientific work in criminal anthropology and psychology, pellagra, etc., and of the discussions of these important subjects by various critics. It should be read, not only by the neurologist, but by the criminal lawyer, the sociologist and philanthropist and by every man, physician or not, who wants to keep abreast of modern thought. The Rebman Company take special pride in their paper. There is no eye-strain from glistening surfaces, the book opens with flat pages requiring no readjustment of focus in following the line, and, on first taking up the book after being accustomed to the heavily impregnated paper used by so many publishers, the hand flies up. The labor of reading is thus lightened and there is not the temptation to let the book lie in the lap and bend over it to the detriment of the eyes.

The Practical Medicine Series (10 volumes annually). Vol. 6, **General Medicine:** General Editors for the Series, **Drs. Gustavus P. Head and Charles L. Minx;** Editors for this volume (as well as for Vol. 1 on the same subject) **Drs. Frank Billings and J. H. Salisbury.** The Year Book Publishers, Chicago, 1911. 353 pages, illustrated. Price for this volume, \$1.50, for the series of 10 volumes, \$10.

We have already reviewed previous volumes of this series which does so well for the busy practitioner and student, the work of sifting the wheat from the chaff of current medical literature. We note with pleasure the quotations of two physicians in our territory: Dr. Henry L. Elsner's (Syracuse), treatment of catarrhal jaundice; and E. Fuld's rediscovery, or rather independent discovery of A. L. Benedict's effervescence test for gastric acidity, with the manly recognition of the priority by Fuld.

Diseases of the Stomach, with Special Reference to Treatment, Charles D. Aaron, M.D., Detroit; Lea & Febiger, Philadelphia and New York, 1911. 555 pages, 21 plates and 42 other illustrations.

It is with a feeling of especial personal interest that we read this valuable addition to medical literature, as Dr. Aaron was a Buffalo boy, a graduate of the University of Buffalo and as we were his preceptor. Dr. Aaron very wisely follows the customary arrangement of previous books on the stomach, instead of attempting to give an impression of novelty by putting things out of their natural order. The true originality of the book appears all the more forcibly to the systematic reader. Dr. Aaron's belt for nephroptosis and enteroptosis, his work on epigastric herniæ and numerous minor points strike the eye as the reading progresses. The scope of the work is somewhat broader than the title, faecal analyses and duodenal investigation, being included. The colored plates illustrating gastric analysis are very convenient though we may say that the end reaction with alizarin does not give quite the tint that we see in an opaque, white porcelain titration dish, which we prefer to transparent beakers for all such work. Dr. Aaron, in common with most authorities, reads for free HCl at the complete color change with di-methyl-amido-azo-benzol, whereas we hold with the support of the minority, that the true end point for free acid is at the change from red to orange, about 10 degrees below the end-reaction.

These minor points of difference detract in no way from our high appreciation of the book and we always reserve the right to a change of view, as evidence accumulates. We commend this book to the use of the profession. Dr. Aaron, Dr. Buchmann and the editor originated the call which led to the organization of the American Gastro-enterologic Association in 1897 and Dr. Aaron has been secretary of that body continuously until the present year when his reiterated request for relief was finally granted with regret. Dr. Aaron's reputation is more than national and Buffalo, as well as Detroit, may well be proud of him.

A Manual of Practical Hygiene, for Students, Physicians and Health Officers, by the late Dr. Charles Harrington, 4th edition by Dr. Mark Wyman Richardson; Lea & Febiger, Philadelphia and New York, 1911. 850 pages, 12 plates and 124 engravings. \$4.50.

One is fairly overwhelmed in attempting to review this colossal work and it may not be out of place to call attention to its cheapness merely from the standpoint of quantity, without regard to its high standard of quality. The first 268 pages comprise a very good substitute for the average work on dietetics, though the particular attention paid to analyses, detection of

adulterants, etc., leaves a place for books dealing especially with dietetic therapeutics. Air, the soil, water, sewerage, construction of buildings, disinfection, etc., bring us to page 616. We then find a very complete treatise on military and naval hygiene, tropical hygiene, the relation of insects to disease, occupation in its relation to health, a brief but scholarly criticism of vital statistics, pointing out many fallacies which the ordinary student does not realize, a section on personal hygiene, a lucid discussion of immunity and various practical considerations of vaccination, quarantine, etc., and the book properly ends with a treatise on the disposal of the dead. In this last section, we note the increasing popularity of cremation and the fact that the Buffalo Crematory was among the earliest in the country.

The purchaser of this work is getting, not a book but a library.

A Manual of Clinical Diagnosis by Charles E. Simon, M.D., Baltimore; Lea & Febiger, Philadelphia and New York, 1911. Seventh edition, 778 pages, 25 plates, 168 engravings, \$5.00.

The need for this new and enlarged edition is based both on the steady growth of medical science, largely due to the author, and on the equally steady demand for Simon's work, requiring either a new edition or a reissue of the previous edition. In the majority of cases, the popularity of a book depends upon the reputation and prestige of its author, even sometimes upon a position which implies a market. It would be putting the cart before the horse to say that Simon's first edition made him, but there have been few instances in the history of medical publication, in which a book sold so widely and so rapidly on its intrinsic merits, in which a book developed instead of following upon prestige.

While, for the sake of compactness, the author has left a field for treatises dealing specifically with the urine, blood, stomach contents, etc., his work is no student's manual or trite assemblage of clinical tests. Thoroughness and progress may be read between the lines. We like, too, the repeated dedication to his wife, in acknowledgement of her help.

Erie County Medical Society

Received too late for publication in proper place

THE regular quarterly meeting of the Medical Society of the County of Erie was held, on Monday evening, October 16, 1911, in the Buffalo Library Building, with President McClure presiding.

Minutes of the previous meeting and the Council meetings were approved.

New members were elected as follows:

Louis A. Kaiser, Alfred F. Luhr, John G. Chadwick, James C. Haley, R. Montfort Schley, George F. Harris, Chester C. Cott, all of Buffalo, N. Y., R. H. Wilcox, Tonawanda, N. Y., and Allen L. Haenszel, Ebenezer, N. Y.

Dr. George L. Brown, Chairman of the Board of Censors, submitted a detailed report of the work of the Board in which, among other things, he gave an account of the various prosecutions since the last meeting, the important ones being as follows:

For the illegal practice of medicine, a fine of twenty-five dollars was imposed and collected from each of the following:

Fannie Cirese, Joseph Stein, Agnes Wrzesinska, Anna Miller. The first named has left the city.

Drs. A. E. Collins, Matthew Willoughby, Frank B. Voght and Charles Monroe Manges were reported as being under bail for alleged criminal practices.

Several other flagrant violators of the medical law were driven out of town, the most important of which was a Mr. Mereroff, proprietor of the Porter Medical Company which company has been doing business in Buffalo and many other cities for a number of years.

Mr. Mereroff gave a bond for his appearance, but his case has not yet come to trial. The Buffalo offices of the company have, however, been closed since last spring.

Dr. T. H. McKee, Chairman of a Special Committee appointed for the purpose of obtaining the records of public officials on sanitary and health matters, made a report in which he stated that the large number of physicians of Buffalo and Erie County ought to wield a powerful influence for good in this behalf, if their influence was exerted in a systematic manner. Furthermore, if the public officials knew that their actions were being watched by the medical fraternity, the results, in many instances, would be different.

On his motion, an appropriation of one hundred dollars was set aside to be used for this purpose during the coming year.

On motion of Dr. McKee, the following resolution was adopted:

"WHEREAS, a concerted attempt is being made to undermine the authority and efficiency of the Health Department and to subject the community to the risk of smallpox epidemics by abrogating that section of the ordinances which makes vaccination compulsory, be it

Resolved, That the members of the Erie County Medical Society hereby register a vigorous protest against any such change in the law; and further

Resolved, That we heartily endorse the attitude of the Health Commissioner, and especially commend him for the stand he has taken in this matter, as well as in relation to pure food regulations, and that a copy of these resolutions be forwarded to the Aldermen, the Councilmen and the Mayor."

Also, on motion of Dr. McKee, the Delegates to the Medical Society of the State of New York, were instructed to urge, at the next meeting of said Society, the desirability of proper teaching on the subjects of smallpox and vaccination, in the various medical colleges, it having been demonstrated that many graduates are absolutely uninformed on this subject.

MISCELLANY

Progress of the United States

POPULATION 1800, 5 1-3 million; 1910, 93 3-4 million. Area 1800, 843,255 square miles; 1810, 1,734,630; 1850, 2,995,536; 1853, 3,026,789, since which date there has been no increase in the continuous area of the continental states.

Per capita debt, 1800, \$15.63; 1865, \$76.98; 1911, \$10.83. Per capita circulation of money, 1800, \$4.99; 1911, \$34.35 (but probably having the purchasing power of only about \$10 in 1800).

Excerpts from Statistical Record of the Progress of the United States, 1800—1911, which can be had by application to the Bureau of Statistics, Department of Commerce and Labor, Washington, D. C.

AUTOMOBILE EXPORTS.—In 1901, less than a million dollars' worth of automobiles were exported from the United States. In 1910, the amount was thirteen million. Calculated by increase for the first seven months of 1911, and including automobile parts and tires, the total will reach twenty million for 1911. Meantime, the average price, per machine has fallen from \$2,000 for 1908 to about \$1,200 for 1911. About 40 per cent. of the exports go to Canada.

INTERNATIONAL LIST OF CAUSES OF DEATH.—Until 1893, no two countries used the same forms and methods for compiling mortality reports. In 1907, Bertillon estimated that the uniform International system applied to over two hundred and twelve million of population. Since then, the registration area as well as the population of the United States have increased and Great Britain has been added. The entire western hemisphere, practically all British possessions and dependencies, China, Japan

and many European countries now employ the uniform system. All physicians are urged by the Census Bureau, to study the International List of Causes of Death and to coöperate toward securing reliable statistics by exercising the utmost thoroughness in filling in death certificates, in accordance with instructions issued by local boards of health in coöperation with the general authorities.

THE NEW YORK STATE DEPARTMENT OF LABOR, Bureau of Labor Statistics, calls attention to Chapter 258 of the Laws of 1911, which requires medical practitioners in this state to give immediate notice to the Commissioner of Labor at Albany of every case attended by them of *poisoning by lead, phosphorus, arsenic or mercury* and every case of *anthrax* or of *compressed air illness* (the latter commonly known as the "bends") if such disease was contracted as a result of the nature of the patient's employment. Failure to give such notice renders a practitioner liable to a fine.

The notice must state the name of the patient, his postal address, his place of employment, his occupation, trade and the disease from which the patient is suffering.

Blank forms will be supplied by the Bureau on application.

BUSINESS WOMEN.—Dr. Eugenia Hancock of New York, endorses the advice of Dr. Martha Lovell of Boston, against women entering into business life. This reminds us of certain remarks which our friends have made regarding discrepancies between practice and theory in diet. Dr. Hancock describes the ocular, nervous and general physical break-down of the business woman between 40 and 50. Far be it from us to advocate a general abandonment of household duties and domestic life on the part of women. Still we can call to mind a good many business and professional women who are active, healthy, happy and young looking at the age mentioned, and a good many housewives who are prematurely old, physically and mentally in a state of decadence, at the same age.

A CONVENIENT FORM FOR KEEPING BISMUTH-PASTE READY FOR USE.—The following method of putting up bismuth-paste is convenient, and meets all the rigid requirements of strict asepsis:—Small collapsible tubes, such as vaseline is dispensed in, are procured. These tubes differ from vaseline tubes in that they end in a pointed snout, over which a protective cap screws. The tubes are sterilized by dry heat, and are filled with the paste, after it has been sterilized. The open end of the tube is closed

by folding it on itself several times. The paste is used by removing the screw-cap, inserting the nozzle into the fistula, and forcing the paste in by finger-pressure on the tube.

M. G. SEELIG, St. Louis, *Interstate Med. Jour.*

HARVESTING AND DISTILLING WINTERGREEN.—Some notes of a trip through Monroe County, Pa., the principal wintergreen producing section of the State, published in the *American Perfumer*, make interesting reading.

The producing cost depends almost entirely on the cost of gathering the raw material. The leaf pickers were formerly paid about \$1 for 100 pounds, but this price has risen till at the present time expert pickers cannot be obtained for less than \$2 to \$2.25 a hundred pounds. A good picker can gather this quantity in one day. The wintergreen plants grow to a height of three to four inches, though the stems, some seven or eight inches long, trail for half of their length.

There are about sixty stills distributed over Monroe County, in a section about ten miles by twenty miles. Some of these stills have permanent locations, while others are moved from place to place, as the leaves in the neighborhood are exhausted.

DENATURED ALCOHOL.—Denatured alcohol is essentially a farm product. It may be distilled from potatoes, corn, cassava, beets, sugar-cane and other starch and sugar-bearing grain, plants and vegetables. It is, therefore, simply the ordinary alcohol of commerce, freed from the internal revenue tax, when made unfit for use as a beverage. The United States internal revenue department statistics for the fiscal government year ended June 30, 1910, show that there were used in that period 10,598,749.2 gallons as compared with 7,971,636.4 gallons for the fiscal year ending June 30, 1909.

The Department of Agriculture has just published a report advising the use of potato culls for making industrial alcohol.

The spirit yielding material in vegetable matter is its fermentable contents. It has been demonstrated that one hundred pounds of the following farm products will produce alcohol in the following quantities: Rice, six wine gallons, 190 proof; rye, barley, spelt corn and sorghum seed, 5 gallons; Irish potatoes, 1¼ gallons; sugar beets, 2 gallons; sorghum or sugar cane, 4 gallons; waste molasses, 6 gallons; grapes, 2 1-6 gallons; banana, 4 4-5 gallons, and other fruits from 1 to 1½ gallons.

JOHN G. CAPERS, Commissioner.

Educational Opportunities in Chicago

UNDER the above title, the Council for Library and Museum Extension, representing the municipal Board of Instruction, various libraries, the park commission, universities and other higher educational institutions located in Chicago, museums, certain clubs and societies having philanthropic objects, have published a pamphlet describing the manifold opportunities for self-education open to the public. Publicity and coördination are the general divisions of the work of this council: Publicity meaning rather the informing of the public as to what educational advantages are before them either free or at nominal cost, than the exploitation of the city to the country at large. Various institutions not directly represented in the council, as the Y.M.C.A., musical organizations, lecture clubs, L'Alliance Francaise, an important Catholic college, etc., are described or mentioned in the pamphlet.

Chicago is a large city, important commercially and economically, but also in intellectual and cultural matters. Though not so large as New York, it impresses a stranger as being, in some respects, greater, at least in the unity and far-sightedness of its public policy.

Education of a voluntary nature, of adults or of youths of high school and college age, who must earn a living, is an important factor in every community. Granted the ordinary foundation of compulsory education in force in most enlightened communities, and a fair degree of intelligence, there is scarcely any text book study, language, history, logic, etc., natural science or other branch not requiring technical laboratory training and constant preceptorship, which cannot be gained by access to good libraries, museums, lectures, combined with field work available to a greater or less degree for each science, according to accidents of environment. What is needed in most cities, and what, as we understand it, the Chicago Council aims especially to supply is a helping, guiding hand and a systematizing of the educational material available. Without such help and systematic coöperation, the public merely sees a lot of curiosities in museums, strange plants in green houses, a free menagerie, and is diverted by stereopticon shows.

Another highly important function of municipal educational institutions is that it keeps people out of mischief. With abundant leisure after the modern short working day, with exaggerated notions of liberty and distorted ideas of politics, idleness may not merely lead to personal dissipation and deeds of violence, but to serious organized scheming against the essentials of law and good order. While, piece meal, libraries, museums, zoos,

horticultural displays, free evening entertainments of a literary and scientific nature, may do much in this direction, they cannot give the balance and sustained interest of a genuine, systematic education.

During the preliminary agitation of the establishment of a collegiate department of the University of Buffalo, we took an inventory of the educational material in libraries, museums, etc., available and reached the conclusion that, for everything except actual class room instruction, the city already had the equivalent of a university rather beyond the average. Chicago's example might well be followed—and the plan extended and intensified—by every city in the country. Even very small towns could greatly increase their civic usefulness by coöperation on the part of disjointed units of educational work.

DR. JOHN W. DRAPER (*Indianapolis Medical Journal*), made the first photographic likeness of any person in the country. The *Literary Digest* for May 13, says that the model for the first portrait which was taken in 1839, was Dr. Draper's sister and his substitute for the modern camera was an old cigar box with a spectacle lens. The subject had the pretty name of Dorothy Catherine Draper. Jacques Daguerre invented the process that bears his name. Daguerrotypes are now simply mementos.

THE Medical Department of the Tulane University of Louisiana, announces the inauguration of a Department of Tropical Medicine, Hygiene and Preventive Medicine, beginning October 1, 1911, in charge of Professor Creighton Wellman and Staff.

Laboratory courses, clinics and lectures will be given in the regular junior and senior classes, and, in addition, graduate courses are offered, for which certificates will be issued, counting towards special degrees to be created as soon as the Tulane School of Tropical Medicine is in force.

THE CLIMATIC AND HYGIENIC INFLUENCE OF FOREST GROWTH.

James M. Anders, Philadelphia, Pa., states that forests are useful as modifiers of extremes of temperature, especially the daily range, and as rendering summer less sultry and winter less severe. They are natural conservers of aqueous vapor, thus maintaining an unvarying degree of atmospheric humidity, and are natural producers of ozone, which removes the natural organic impurities from the atmosphere by oxidation.—*Medical Record*, September 30, 1911.

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ORIGINAL COMMUNICATIONS

Review of 100 Radicals

By GEORGE F. COTT, M.D.

Clinical Professor of Otology, University of Buffalo

AFTER having seen the daily out-put of radical middle ear operations at Vienna in the '90's I made diligent inquiries and found that in America the operation was not performed up to that time. During the next few years however, cases were reported from time to time. I began operating in 1899 and early in 1900 I reported four cases of tympano-mastoid exenteration. Since then I have added a fair quota every year until I now have reached considerably over a hundred. But it is of the first one hundred cases I wish to write in this paper. One has a varied experience in one hundred operations which is well worth the relating. In the first place one cannot always tell what will be found during the progress of the operation.

Occasionally the otologist sees the patient the first or second time, with a vague history only. Temperature having been taken but once a day; patient perhaps in bed; no symptoms relating to disease of the inner ear or a previous attack; many symptoms under-valued by the family; and so you are left to your own resources. Even when one has had a chance to observe the patient for some months the operation findings may surprise you. In a large proportion of cases an almost exact diagnosis can be made. When we have a typic lesion this is generally readily done, but as in many other pathologic conditions there are masked symptoms which often leave one quite in the dark.

When operation is required on a case suffering from some zymotic disease the destructive process is out of all proportion to the symptoms ordinarily found. On the other hand, in a slow long drawn out process the brain may become involved so insidiously that the main lesion will be entirely overlooked.

Occasionally after radical treatment, months or years later, symptoms turn up which make the surgeon think a good long Think. He will occasionally find cholesteatoma develop in the old wound, neuritis, facial paralysis, infection in the internal ear, brain etc. Usually however, after the operation the danger of further trouble is obviated. With all the knowledge of modern

treatment of disease of the ear at hand, still there are numberless cases found throughout the country with chronic otorrhoea.

If all such patients were treated early there would be no need of a chronic discharge, always endangering the patient's life.

Let me call to the mind of practitioners and patients the dangers of running ears. First, there is always a drain and sometimes retarded development of the patients: Society shuns them on account of the odor emanating from the diseased bone. There is always danger of infecting some other part of the anatomy. Pus may form under the dura mater, brain abscess, sinus thrombosis, pachymeningitis and lepto-meningitis and labyrinthin infection. These secondary conditions are not at all uncommon. My own experience has given me forty-two cases out of one hundred. In all of these one hundred cases there were but three acute suppurations calling for radical treatment and of course needed hurried attention. These latter are sometimes more destructive than those of long standing. When occurring during or at the end of a zymotic disease the resisting power of the body is away below par, then great damage is done without proportionate symptoms. This is usually not the case in chronic otorrhoea. The amount of damage in an ordinary average case of chronic otorrhoea can never be estimated until the operation is completed. Epidural abscess is often found when least expected. Pachymeningitis is most common and even abscess of the brain has been found occasionally. In one patient one entire hemisphere was bathed in pus yet the patient walked without assistance to the operating table three days before death; having had very little temperature and slight pain in the ear.

The operation is performed first to stop the discharge; relieve the patient from the embarrassing odor which commonly accompanies discharge from the ear; to prevent brain infection and to prevent further constitutional impairment. I believe as people gain more knowledge on this subject there will be but few chronic cases as compared with the many at present, for early treatment is usually successful and then the grave will be robbed of a most fruitful source of revenue.

The percentage of recoveries after a radical operation is large, but few ears continuing to discharge after some weeks. But even when some discharge remains, the danger of intracranial involvement is generally obviated. The one danger however when discharge continues, is cholesteatoma and once in a while labyrinthitis.

The operation itself is not so very simple. One must avoid injuring the lateral sinus, the dura, the internal ear, the facial

nerve, etc. Yet all diseased bone must be removed even though these structures are made to suffer, or further infection will result.

The variety of conditions which I found either before or during operation in these one hundred cases of radical middle ear exenteration are interesting and cover a large field. Pus under the dura stands high, but if uncomplicated, all recover.

Epidural abscess, 18; 17 recovered; circumscribed pachymeningitis, 3 recovered; lepto-meningitis, 2 died; sinus thrombosis, 5 recovered; cerebral abscess, 3 died; ulceration of brain, 1 died; band of fibrous adhesion, 1 recovered; fatty thrombus, 2 died; sinus in brain, 2 recovered; cerebellar abscess, 1 died; pus in lateral sinus, 1 recovered; unknown, 3 died; labyrinthitis, 6, 4 recovered; tuberculosis of the ear, 3 died; carcinoma of the ear, 1 died.

The above series of cases of complications mostly within the skull shows a recovery of 33 out of 52 patients or 63.4 per cent. Cases were not selected, in fact some reported here were in extremis when operated upon. This table shows conclusively the dangers of neglecting a "running ear." A large percentage showing some form of trouble within the cranial cavity.

This condition of things can only be remedied when the family physician insists upon proper care being given young patients with acute middle ear suppuration especially following zymotic diseases, for those are most apt to become chronic.

These fifty-two cases of complications were not in as many separate patients, for several with brain abscess and sinus thrombosis had also epidural abscess, each finding is separately classified. Tuberculosis of the ear had not involved the brain at time of operation but patients died some months later of general infection. Sarcoma was found at the operation but cannot be classed as intracranial. Those cases classed as unknown were out-of-town operations without any history except chronic otorrhea of very long standing exhibiting no symptoms but lassitude and headache.

Of the labyrinth cases two recovered with operation, two without operation and two were operated upon with the idea of relieving the patients who really had already developed lepto-meningitis. Pachymeningitis was found three times without other complications after removing the tegmen. Sinus thromboses were typical cases, one exhibiting a temperature varying nine degrees in twenty-four hours; reaching $107\frac{1}{2}$ degrees; the next highest was $106\frac{1}{2}$. In the first the Jugular was tied. Dur-

ing the following year the patient aged 19, had abscesses form in different parts of the body but finally recovered. In one case a fibrous band tied the dura down to the skull and was one-fourth inch in length, nothing could be found to cause the pain of which the patient complained. She got considerable relief after it was excised. Fatty thrombosis gave no symptoms during life and was only found at operation, both patients were in bad condition at the time. A sinus was found in two cases in which a probe entered into the white substance, an inch. One patient died a year later of epidemic cerebro-spinal meningitis through a small opening in the dura $\frac{1}{8}$ inch in diameter. Post-mortem showed no connection with old lesion which had completely healed. The second case was operated upon four times within a period of ten years the last time an opening one-half inch was found in the brain six years after the third operation, in which the tip of a finger could be placed. She made a good recovery. Cerebellar abscess was found post-mortem. Pus in lateral sinus was found in a case of thrombosis walled off at either end of the lateral sinus, patient made a good recovery.

Facial paralysis has been rather too frequent. I certainly have had 15 per cent. follow the operation. One came on during the operation. All the rest followed several hours to several days later. All recovered in four weeks to several months without any treatment.

METHOD OF OPERATING.

When sclerosis affects the whole mastoid I open the mastoid portion only enough to give free drainage to antrum and middle ear, opening all small spaces in the antral wall, removing outer wall of aditus and external wall of epitympanicum. If on opening the tegmen is found, this is thoroughly explored and freely opened. Whenever diploic mastoid is encountered all cells are laid bare and the antrum opening made correspondingly larger. The whole cavity is then covered with periosteum and skin and the ear drained through the natural opening. Healing takes place from four weeks up. Some discharge indefinitely, others intermittently, for some time. A few begin after some years but are easily controlled. All however receive great benefit. Since I mildly curette the bony eustachian tubes, recurrence is less often. Healing is promoted by using the Siebenman flap which prevents granulations from forming at opening of the meatus. It consists of slitting up the soft meatal wall and at its outer portion cutting a "V," the base upwards, and stitching the flaps backwards. Immediate skin grafting has not been successful in many hands. My patients receive no skin preparation be-

fore operation. No hair cut or shaving the field. Iodine only is used in 5 per cent. tincture. Healing is by first intention with few exceptions. This method I have used the last two years and shall continue it hereafter.

1195 MAIN ST.

Some Statistic Studies of the Cures of Inebriety

By T. D. CROTHERS, M D.
Superintendent Walnut Lodge Hospital
Hartford, Conn.

A HALF a century has passed since the question of the cure of inebriety by medical means was first discussed by physicians. Some of the early studies were very curious groupings of figures and statements. Others were startling results claimed to have followed the application of certain remedies, but in all there was a timidity and assertive dogmatism common to all early studies of new subjects.

The empirics and persons with limited experience, have claimed a percentage of cures by the application of medical means, that ranged all the way from 60 to 90 per cent. The practical scientific workers while asserting that many cases have been positively cured, have hesitated about the percentage and the extent of the curability. This general experience continues up to the present.

Much of the literature that is reliable on the causes and treatment of inebriety has turned on the individual conception and theories of what inebriety is and is not. Many persons believe that inebriety is simply an abnormal thirst, or craze for spirits, and when this is controlled, the patient is cured.

They reason that the desire for spirits is a mental condition which can be reached by will power, and its reappearance is largely under the control of the patient. Persons holding such theories report a high degree of curability.

Empirics who claim to have discovered some new remedies, assert that all inebriates are curable. Even the Three Days' Cure promoters are emphatic in their claims that the drugs they give, permanently destroy the drink symptoms. Others more conservative, believing that inebriety is a half-vice and half-disease are confident, that if the methods they described are used, at least half of all patients will be cured.

Many good physicians belong to this class, and when asked for data on which they rest these conclusions, it is found to be based on the histories of patients, extending one or two years

back. They reason that if the patient abstains from spirits for this time, the disease is permanently eradicated.

Many persons believe that inebriety is purely a moral condition, to be treated by moral means, such as prayer and the pledge. They claim a very large proportion of all persons who are sincere in following the means which they present will be cured. Thus temperance reformers, evangelists and church people, as well as empirics, present a startling statistic array of cures, and the impression is created, that if these were real and veritable, inebriety would soon disappear, and be stamped out.

Hospitals and sanatoriums where these cases are treated with some scientific precision, seldom publish exact data of cures, but use the term "recovery" as describing the present condition of the patient, or that which has followed after a short interval. Tables of results show a certain number of persons who have recovered, and others who have failed.

The recovered persons frequently remain in this condition for years, but the approximate number of these is not certain.

Practical studies of these persons by trained physicians show that the drink craze is only a symptom and not the disease, and this symptom of course, is easily controlled. A great variety of means and combinations of drugs will break up this drink symptom for a time, but its return is dependent on other causes which are not reached by the so-called specifics and drugs, used to cover up the symptoms.

The real causes are complex and very largely depend on the individual and a variety of conditions. The demand for drink is simply the call for relief from some physical and psychic depression and irritation, local or general. Spirits afford an anaesthesia which covers up this irritation and psychic fatigue.

The nervousness including excitement, depression and a great variety of other conditions, which are suppressed by spirits, breaks out again, and the means which produced relief at one time, are called for again.

Unlike many other drugs, the anaesthesia of spirits creates a demand for its repeated use, and this becomes a veritable obsession that is both psychic and physical. This condition is often inherited in low vitality, feeble resisting power, and a constant effort to overcome it, is a part of the disease. It is acquired by neglects, strains and drains, and everything which disturbs the normal relation of body and mind.

No other substance known, has such peculiar anaesthetic action on the motor and sensory cells. A certain periodicity is created, in which this anaesthetic relief is called for, with great

intensity. This particular obsession for relief from alcohol is self-limited in many cases, and after a time dies out.

The degeneration which the use of alcohol has formed remains, but the drink craze disappears. What pathologic changes have occurred in the organism, whether produced by other drugs or remedial forces to bring this about, is unknown.

The subsidence of the drink craze is often considered as due to the specific action of certain drugs or certain particular methods of treatment. The return of the drink symptom and the failure of these particular means show that the former deduction was wrong.

Innumerable cases are noted of the sudden subsidence of the drink craze both with and without any special treatment, and considerable literature on this subject is devoted to theories, how and why this occurs. Leading authorities in this field, recognize the physiologic change, and seek to encourage it by the use of constitutional means and measures, to build up and restore the organism to its previous normal condition.

In the effort to determine the curability of the average inebriate, it is essential to know the general causes and conditions, both inherited and acquired. This forms a basis for the probable permanency of the subsidence of the drink craze, and the restoration of the patient. Some of the studies based on these general considerations, began first at Binghamton in 1874. The New York State Inebriate Asylum at that place, in reply to the criticisms concerning its work, made a statistic study of 1,200 patients, who had been under treatment six years before the inquiry was made.

The friends, relatives, and patients themselves, were written to, concerning the present condition and general health of the patient. There were over 900 replies, showing that 62 per cent. of all persons living, were still temperate and restored.

These data were criticized and the late Dr. Willard Parker, the President of the institution, ordered a re-examination of the returns, and further correspondence with the patients. The old data were confirmed and it was shown that over 60 per cent. of patients who had been under treatment five years before, were living temperate normal lives.

Three years later, in 1879, the late Dr. Joseph Parrish of Philadelphia made a study of the history of 100 persons who had been under treatment for inebriety ten years before. Sixty-one persons responded to the inquiry and 39 per cent. were restored and practically cured. These data were studied again and fully confirmed.

The late Dr. Norman Kerr of London, England, made a collective study in 1884 of the histories of persons who had been treated medically for inebriety in sanatoriums and in their homes by physicians. His data showed that six years after treatment 40 per cent. were total abstainers and well. The most thorough study of the curability of inebriety was made by Dr. L. D. Mason of Brooklyn, N. Y. in 1889, of patients who had been under treatment at Fort Hamilton Hospital for inebriates.

Of 4,600 patients who had been treated, from six to ten years before this time, 41 per cent. were temperate and cured. A large number had disappeared, died, and become insane. Many were lost sight of, but the records showed that this large number had received permanent benefit.

The late Dr. Albert Day of the Washington Home, Boston, Mass., attempted the history of the inmates of that home, particularly those who had been away over ten years. The result of several thousand circulars sent to the friends of the patients, succeeded in getting the history of over 40 per cent. Of this number, 20 per cent. were reported as cured and restored.

These were approximate figures and as the inmates of this institution were largely of the chronic class, and their treatment had been brief, the facts were very encouraging.

In a personal experience of thirty-five years, covering several thousand cases, I have repeatedly made studies of small groups of inebriates under treatment for from six to twelve years before the inquiry was made. The general results have shown that one out of every three is permanently restored, or in other words is still temperate and living a normal life after that interval of time.

These and many other studies made from a small number of cases, indicate that about 30 per cent. of all persons who are treated from three to six months, in well organized institutions, remain restored and can practically be called cured.

There are great difficulties in the effort to determine the exact results of treatment in such cases. Thus persons who have been under treatment in an institution, through pride and other motives, conceal all evidence of such treatment, never referring to the hospital, and regarding it as a shadow in their past history. These are the practically cured patients.

On the other hand, persons who relapse are most vociferous in reporting their previous treatment and the failures of the institution with general criticisms of the methods. In this way the incurables are very easily studied, and those who are restored are very difficult to trace.

Experience shows that egoistic supporters of quack and specific cures, and those who boast of permanent restoration are incurable as a rule, and relapse, sooner or later. Hence, certificates of cures are very unreliable, and efforts to build up an institution, on the endorsement of its inmates are unsatisfactory.

A certain number of persons, after treatment in an institution, remain for many years restored, then suddenly relapse and die. Others, after years of abstinence, become drug takers or suicidal. Many chronic inebriates, after the subsidence of the drink craze, develop diseases of old age, and become degenerates and die early.

While the drink craze dies out, and the active or contributing cause, alcohol, is removed, defects of the brain and nervous system remain, or develop into some other form of degeneration and disease.

Many observers who manage small hospitals for this class, have determined from their experience, that the claim of from 25 to 30 per cent. of permanent restorations, is verifiable.

The removal of certain specific causes is followed by restoration beyond any question or doubt. Often the value of hospital treatment depends largely on discovering the nature of the causes of inebriety, removing them and training the patient to avoid them in the future.

Patients in all degrees of chronicity are restored, and the possibilities of treatment along practical scientific lines are very great. Some of the public institutions of Great Britain, particularly in the neighborhood of London confirm this in a most practical way.

In one large farm, managed by the London County Hospital, where degenerate and incurable inebriates are received, the degree of curability from farm work, control and uniform living is very pronounced. Experience in private institutions for mental disease confirms this. Many of the inmates of these places are drink and drug victims, poisoned and exhausted, but from change of life, improved nutrition, habits and thoughts in new environments, recover.

There is a great wealth of illustration confirming this in the experience of private hospitals and sanatoriums. Many of the inmates who are called nervous, over-worked men and women are inebriates in the first stages, and their recovery, follows as a rule, particularly if the patients recognize the real and active causes.

Some of the great sanatoriums of the country are supported very largely by persons whose disability is due to the moderate

or excessive use of spirits, continuously or at intervals. The curability of such patients is the every day history, and the struggle to make it permanent, brings out a great variety of interesting clinical studies.

On the other hand the Government efforts and the legal measures to treat inebriety in jails and prisons, are terrible failures and actually cultivate and grow the very conditions they seek to prevent.

Eminent clinicians affirm that if alcohol and syphilis could be eliminated, a very large proportion of the diseases of today and the mortality would diminish. Instead of 30 per cent. the evident ratio of curability today, this number could be greatly increased.

It is a very gratifying fact to know that the percentage of cures noted in hospitals for the insane is very largely increased by the results of treatment of the alcoholic patients. During the last ten or fifteen years inebriates in various stages, are sent to the hospitals for the insane for treatment. Wards are set apart for them and their treatment and restoration, constitute a very important part of hospital work.

It is evident from the great variety of facts that inebriety is a curable disease. Ignorance of the subject and confusion of opinions surrounded with empiricism, make it a favorite field for quacks. It should be a field of practical medicine for every physician, and may be treated in home and office as well as sanatoriums.

While sanatorium treatment is undoubtedly the great essential in the change of surroundings, there are many records published of home cures with a high percentage. This of course depends on a great variety of peculiar causes.

Such treatment calls for psychic as well as therapeutic measures, and when used in early stages of the disease, there can be no doubt of their success. Almost every physician with a large practice can refer to persons cured at home. Ordinarily he fails to give the proper credit to the means used, considering it more mental and moral than physical. The time is not far distant when inebriety will be treated at home by the family physician, with as much success as any other disease, and also in sanatoriums, where inebriates particularly need a change of living.

The curability is assured beyond all question, but what is needed now is to lift the subject out of the realm of quackery and place it in the field of scientific medicine.

Vicious Union of the Shaft of the Femur¹

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BY vicious union we mean union with such a degree of rotation, bowing and shortening as to result in permanent limp or deformity. The affected thigh is short and crooked; there is tilting of the pelvis and lowering of the shoulder on the affected side. This is due to the small size of the shaft of the femur in the middle third where fracture usually occurs: to the oblique direction of the surface of fracture, which is smooth so that there is rarely or never an interlocking of the fragments. But there is great overriding; due to spasmodic contraction of the very strong muscles of the thigh, and the change in the shape of the tubular fascia lata which becomes shortened by its distention with blood and serum. If this overriding is not corrected, the resulting callus, though large, works at a disadvantage, and bowing results, when the patient begins to bear weight on the leg, even after a long period of immobilization.

How much of this deformity is compatible with good practice is still under discussion. In 1890 a committee of the American Surgical Association led by Stephen Smith decided that it was allowable to have one inch of shortening, and permanent lameness if not due to more than that amount of shortening. But today there is a school of surgeons who hold that anatomically perfect results should be obtained by means of open operation and mechanic fixation. These are the radicals, with Lane of London in the forefront as a leader. They advise operation in all simple fractures. Not all are willing to go so far.

Jonas of Omaha says: "Those of us who had an opportunity of examining Lane's numerous skiagrams of simple fractures on which operation had recently been done, could not help but be impressed with the fact that some of his cases would have done quite as well if the fractures had been reduced by manipulation, and the use of the same external splints that he employed to reinforce the clips and screws which he used through an incision."

Dr. Robert F. Weir of New York after long experience in the treatment of fractures by the conservative method, considers that the results have been satisfactory and more than counterbalance the risk of an open operation.

Ashurst reports in the *Annals of Surgery*, that of 22 cases treated conservatively at the Episcopal Hospital in Philadelphia,

1. Read before the Buffalo Academy of Medicine, May 7, 1911.

and observed later, 14 had perfect results; only 8 had a limp; 5 had a shortening of 2 c.m.; 8 had a shortening of 1 c.m.

Dr. Carlton P. Flint of New York, writes that from September, 1906 to October 1907, there came under his observation at Roosevelt Hospital, New York, 834 cases of fracture of the femur; of these 53 were operated, 27 after delay for corrective purposes. So that while we may not care to operate on every recent case of fracture, still there is a class of cases, which, after conservative treatment has been tried, call for operation, on account of persisting deformity and disability.

In the correction of such a deformity wide incision is necessary, exposure of the point of mal-union, separation of the fragments by chiseling through the callus, freshening the ends of the fragments, and fastening them by some mechanic device; and then supporting the parts by suitable external splints.

Of the various means of fixation, as wire, screws, nails, plates and clamps, they all have the disadvantage of acting as foreign bodies which work against union, often prevent it, and have to be removed. When introduced into bone they cause a rarifying osteitis, so that they become loosened and fail to hold in from one to two weeks. Wire has the disadvantage of giving retention only in one plane. Silver wire breaks easily, and has been replaced by aluminum bronze.

The rigid plate of Lane has the disadvantage, when acted upon through the leverage of the extremity by an accidental movement, of easily wrenching out the screws. This is obviated in the flexible silver plate of Sick. This comes long and can be cut to a suitable length. Intra-medullary splints displace the bone marrow, which has an important function in callus formation, and when of ivory or metal act as foreign bodies, which may have to be removed. So we have usually preferred absorbable ligatures of chromic gut or kangaroo tendon.

Freeman reports that out of 18 cases operated on, delayed union resulted in 9 cases with non-union in two of these. Wire was employed in 6, a clamp in one. Six of these, however, were in compound fractures, and two had no foreign material introduced.

Case Report

GIRL, AGE 6. REFERRED BY DR. PRESCOT LE BRETON.

On April 13, 1910, she suffered a fracture of the shaft of the right femur from being stepped on by a horse. She was treated by some form of splint without extension for two weeks. After nine weeks she was allowed to bear weight on the leg. This



FIG. 1.
BEFORE OPERATION.

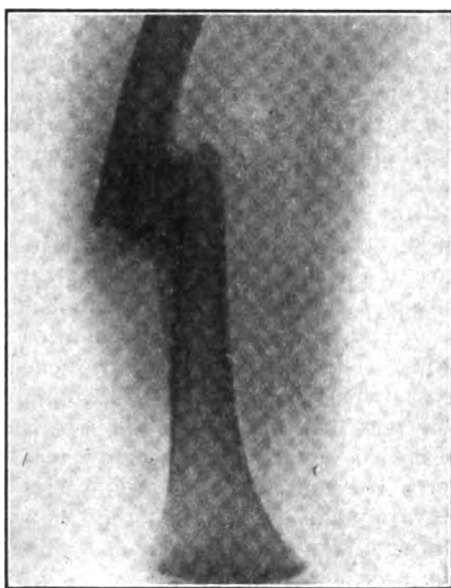


FIG. 3.
BEFORE OPERATION.

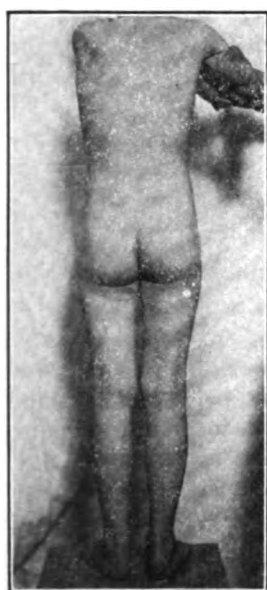


FIG. 2.
AFTER OPERATION.

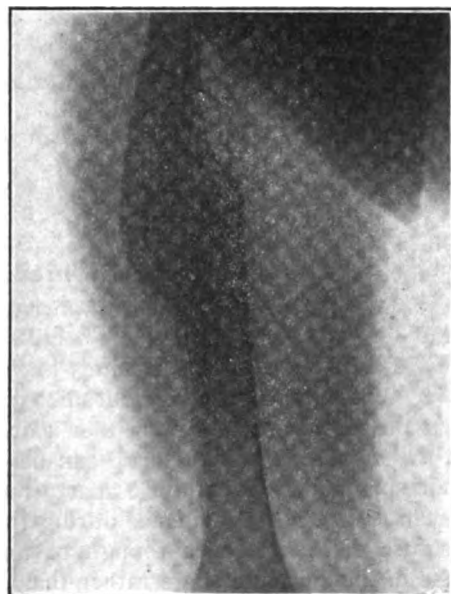


FIG. 4.
AFTER OPERATION.

was followed by bowing. Her parents sought relief from the resulting limp and deformity.

June 30. On examination she walked with a marked limp, carrying the right shoulder and hip low. There was a forward and outward bowing in the right thigh. There was an extensive mass of callus at the point of union. The right leg was $1\frac{1}{4}$ inches shorter than the left.

July 6. Operation. An incision four inches long was made on the outer aspect of the right thigh opposite the most prominent part of the deformity. This was carried down to the bone, exposing the overlapping fragments held together by extensive callus. The fragments were separated by chiseling through the callus. The bone ends were freshened with chisel and bone forceps, making the surfaces to be opposed oblique in direction. A hole was drilled through the fragments at right angles to the freshened surfaces, for the introduction of a ligature of chromic gut. The muscles were brought together with interrupted sutures of plain cat-gut, and the skin with the same material. A plaster of Paris spica reaching to the knee, was applied. During the insertion of the bone ligature, manual traction was made to overcome the shortening. This was replaced by a weight of ten pounds attached by means of strips of adhesive to the leg with foot piece, cord, and pulley.

August 10. The extension and cast were removed and the wound dressed. Healing was by first intention. Union in the fragments was firm. The thigh was straight with $\frac{1}{4}$ inch shortening. Considerable callus was to be felt.

October 27. She walked without limp and presented the appearance shown in the photograph. There was some atrophy of the thigh and calf. The callus was still to be felt.

The Treatment of Chronic Gonorrhoea

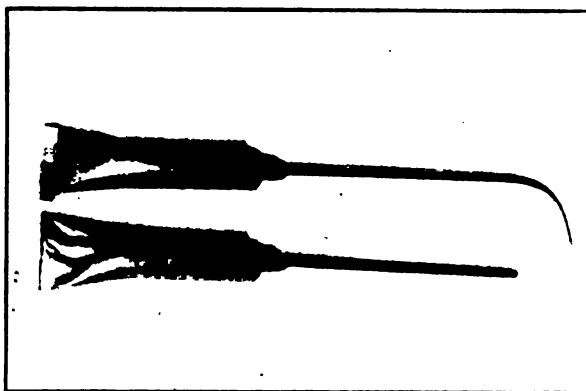
By CHARLES W. BETHUNE, M.D.
Buffalo, N. Y.

THERE is no sharp dividing line between the subacute and chronic stages. By chronic gonorrhoea we understand that the discharge is slight, either a drop only in the morning or, at the most, but a small drop can be expressed during the day. Pain and bodily discomfort, apart from that due to some complication, are not in evidence during this stage. The presence of profuse discharge, even though of long duration, classifies the case in the subacute stage rather than the chronic.

Chronic gonorrhoea has long been one of the bugbears of the medical profession, Ricord, the eminent French andrologist,

is quoted as having said he dreamed one night that he died and went to the lower regions and his punishment was that a long file of former patients passed each pointing a grisly finger at him and repeating, "Ricord, Ricord, you could not cure my gleet." Fortunately, at present we obtain better results and need not fear a similar fate.

The urine in chronic gonorrhoea is not apt to be cloudy but the first glass almost invariably contains shreds. It must be remembered that the discarded epithelium and mucus of the healthy urethra form shreds in the urine which differ from those of gonorrhoea, only in that they contain but few leukocytes and no gonococci. A patient is sometimes seen who can squeeze a purulent drop from the meatus at all times but his urine is free from



BETHUNE'S OINTMENT APPLICATORS.

shreds; the only explanation to offer for this is that there is no mucus in the discharge and this adhesive substance being absent, the pus cells are at once disseminated throughout the urine but are too few in number to render it cloudy. This possibility warns us to centrifugalize all suspected urine which does not contain shreds. Shreds in the first glass and none in the second does not indicate that the infection is limited to the anterior urethra because the discharge is so scanty that the first jets wash out the contents of both the anterior and posterior urethra.

Filling the anterior urethra with a dilute solution of methylene blue and retaining it for a few minutes will stain all the shreds contained there and if the patient then urinates any unstained shreds, they must necessarily come from the posterior urethra.

In most cases the posterior infection has disappeared long before the anterior infection has reached the chronic stage. The

most obstinate chronic cases are those complicated by vesiculitis or prostatitis but fortunately they are in the minority. The presence of a superficial infection of the posterior mucosa does not increase the obstinacy of chronic gonorrhoea:

The average chronic stage in a patient who has been treated throughout by the irrigation method does not last longer than two or three weeks. Cases which have been improperly treated during the acute and subacute stages, especially those complicated by vesiculitis and prostatitis are the most stubborn.

The urethroscope and sound are of the utmost assistance in the treatment of chronic gonorrhoea. The urethroscope enables us to inspect the entire urethra with as much accuracy as though it were the surface of the body. Correct interpretation of the urethroscopic picture of course, requires practice, but when the commoner lesions are once seen they are never forgotten. Large areas of every pathologic urethra are normal so one may become familiar with the normal without resorting to the introduction of instruments into healthy urethras. The patient's lips may be taken as a standard of normal color, dark rose in a brunette and light rose in a blond or anaemic. The mucosa of the urethra is not uniform in color but consists of alternate dark and light stripes each about as wide as a horsehair. The urethral picture roughly resembles a fluted funnel in form, the ridges being formed by folds of mucosa which converge at the center.

The edge of the tube flattens out the folds at the periphery and if it fits the urethra snugly causes an anemic ring at the circumference. From this point to the center of the field the folds increase in prominence until they merge at the center. Their convergance forms the central figure roughly * shaped when normal. Pin point depressions are seen here and there, the crypts of Morgagni. Littre's glands are too tiny to be seen by the naked eye when normal. Space does not permit an extensive discussion of the various pathologic pictures.

Patches of the mucosa whose natural gloss is diminished but with color unaltered, denote a very superficial process. Irregularity or obliteration of the folds, several folds being replaced by a single large fold, and a roughened, desquamating or granular surface, varying in color from intense red to putty yellow, denote an infiltration of the deeper layers of the mucosa with round cells and leukocytes, folliculitis is shown by the red and angry orifices of the crypts, pus often being seen issuing from them. Littre's glands, when inflamed, may occasionally be seen as tiny reddish or yellow granules.

Stricture shows a host of varied forms, from a fiery red area constricted and free from folds, to masses of cicatricial bands almost bloodless, like the scar of a burn.

The sound demonstrates strictures more accurately than the urethroscope but the bulbous bougie has been the source of many errors as it not only demonstrates strictures but also the numerous annular muscular fasciculæ which exist in every urethra. Care must be taken not to mistake the normal tone of the cut-off muscle for a stricture.

Irrigations should be repeated daily, or at least on alternate days. Mild or superficial inflammations, which are seen through the urethroscope as patches of diminished gloss, yield readily to irrigations alone.

Infiltrations of round cells and leukocytes, the so-called soft infiltrations described above, are best treated by dilatation, the passage of full sized sounds, or better, the use of Kohlmann dilators every third or fourth day. Dilatation causes a pressure atrophy and subsequent hyperemia of the urethra which hastens the absorption of the pathologic infiltrate as well as squeezing out the contents of the infected follicles. Dilatation must always be followed by an irrigation to remove the infectious material expressed as well as any bacteria introduced by the instrument.

Applications of 1 per cent. silver nitrate through the urethroscope repeated every fifth day is the best treatment for granular patches. These applications are to be made with a swab and great care must be taken not to smear it over the healthy mucosa.

Folliculitis indicates dilatations which both expresses their infectious contents and stimulates their resolution.

Filing the urethra with antiseptic astringent or stimulating ointments has become popularized through the efforts of Dr. H. H. Young, especially because of the very serviceable instillator which he has invented. (John Hopkins Hosp. Rep. Vol. XIII. P115.) None of the posterior applicators being satisfactory, the writer tried an 18F catheter the tip filed off with a nipple on the other end which fitted the nozzle of an ointment tube. This proved so satisfactory that a straight tube was tried in the anterior urethra. These applicators (made by the Sands-Levy Co.), are sterilized by keeping them immersed in a 5 per cent. solution of phenol, before using the tube and applicator are held under a stream of hot water to remove the phenol and soften the ointment. If an irrigation is given it should precede the ointment application.

Anhydrous lanoline is the only satisfactory vehicle for urethral ointments as vaseline and lard do not readily penetrate the

mucosa. Formulae are legion: phenol, nitrate of silver, Argyrol, Protargol, etc., are the basis of the antiseptic. I personally prefer Crede's ointment with ichthyol as an adjuvant diluted with at least ten times its quantity of lanoline. Alum and zinc sulph. are the best astringents and salicylic acid may be used as a stimulant in cases where the mucosa is replaced by thick dry epithelium. All these substances may be used in a mixture two or three times as strong as their corresponding aqueous solutions. The applications may be repeated daily or on alternate days and continued for a long time.

At this point it might be well to mention a few facts in regard to lubricants for urethral instruments. All oily substances are to be avoided as they coat the mucosa with a waterproof substance which protects it from the subsequent irrigation. There are numerous water soluble lubricants on the market having Iceland moss or gum trag as a base. The most satisfactory is Caspar's, whose formula is as follows: dissolve 00.25 Gm. of oxycyanide of mercury in 100.00Cc. of boiling water and add 3.00Gm. of gum trag ribbons; allow the mixture to macerate for a week; then stir in 30.00Cc. of glycerine, strain through gauze and sterilize by steam.

Chronic gonorrhoea complicated by vesiculitis and prostatitis is apt to prove very intractable. Vaccine should be administered every third or fifth day, the initial dose being 5,000,000; double the dose at each injection until either a reaction or improvement occurs then repeat the last dose not oftener than every seven days.

Massage of the infected prostate and vesicles is not so apt to result in epididymitis during the chronic as in the acute and subacute stages. In spite of its comparative safety at this period epididymitis occasionally results. The technic is as follows: the patient holds his urine for several hours before treatment as it is impossible to massage the vesicles unless we have them supported by a full bladder. The patient drops his trousers and leans on his abdomen over the edge of a table. The index finger, protected by a rubber cot, is lubricated with vaseline and inserted into the rectum. Each vesicle is then stripped down by several gentle strokes. The same treatment is then applied to the prostate. Massage is often followed by the expulsion of considerable mucopurulent material from the meatus. The patient then urinates and is irrigated, the bladder being filled if possible. I believe that the stimulation of the massage is of more benefit than the simple expulsion of the infectious contents. Massage may be repeated every third or fifth day. Occasionally operative

drainage of the vesicle or prostatectomy is our only resort. (Fuller).

It must be borne in mind that tuberculosis of the epididymis, cord, prostate and vesicle occasionally follows a gonorrhoeal infection of these structures. The absence of night sweats, emaciation, etc. during the early stages of genito-urinary tuberculosis together with the uncertainty of the various tuberculin reactions justifies an exploratory section of the scrotum and excision of small portion of the epididymis for microscopic examination in any case which does not show marked improvement after several months of proper and persistent treatment.

Chronic gonorrhoea often taxes our patience, and our patients, also, to the utmost but only a very small proportion, if any of purely gonorrhoeal infection, are incurable. Two or three months is the average duration in cases improperly treated during the earlier stages but at least 5 per cent. require six months treatment.

Space does not permit a prolonged discussion of the proof of cure in gonorrhoea. Failure to find the gonococcus after repeated examinations of the tripper faden, sediment of centrifugalized urine, material massaged from the prostate and vesicles together with the absence of all clinical signs of inflammation. No patient should marry in less than a year after all signs of infection have disappeared as time is a very important factor in the elimination of the gonococcus.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

ON THE "SACRED SOIL" AGAIN.

We have heard distant firing in Virginia at intervals all day, which appears to be in the vicinity of Snicker's Gap, and have been under orders to move since morning, but night finds us still here. We have, however, received final orders to march at six A. M. tomorrow. Tom Dewey did not go on recruiting service as expected, but sent in his resignation a few days ago. I believe he expects to enter the artillery service. I am sorry to have

him leave the 49th, for he is one of our best officers. Adjutant Selkirk departs for Buffalo in the morning, on recruiting service in Dewey's stead.

November 3. We crossed the Potomac on a pontoon bridge at Berlin this morning, and have marched about seventeen miles today, reaching Purcellville where we have encamped for the night. I was chilled through on the march, as the weather was very cold; our stove comes in place most delightfully tonight. Tomorrow will be Election Day in New York, and I regret that I cannot be present at the polls to cast my vote against Seymour, who is the Democratic candidate against General Wadsworth. On the 4th we reached Union, Virginia, (What's in a name?) and went into camp at three o'clock P. M. for the night, as we supposed, only; but we remained there until one P. M. of the 5th, when we moved five miles farther, and encamped in the woods after dark, where we were without tents, and a colder night we have not seen.

November 6. We marched twelve miles which brought us to White Plains, on the Manassas Gap R. R. I lost my gloves, and so had cold hands today. General Seth Williams told Dr. Mulford yesterday, so the latter informs me, that the Sixth Corps would be given the reserve position, and would always be near McClellan's headquarters. Dr. Mulford also says he intends to resign from the 33d, and enter the Volunteer Staff Corps. I shall be sorry to have him leave our Brigade; but so it ever is, our friends are constantly looking to advancement, here as well as in civil life. The changes in the personnel of the Army, through promotion, casualties, and other causes, is something remarkable. One scarcely knows his friends from campaign to campaign. Mart Clark of the 21st came on the 7th, and spent the night in our camp.

November 8. It is cold and snowed all day yesterday, but our stove makes it comfortable for ourselves, as well as others who call. We were thronged in our quarters yesterday, and Colonel Bidwell spent the entire day with us. On Sunday, the 9th, we moved from White Plains to New Baltimore, a distance of eight miles, over a mountainous country and in a searching wind. General McClellan has been removed from command, and General Burnside appointed thereto.

EXIT MC CLELLAN—ENTER BURNSIDE.

November 11. Today, Tuesday, General McClellan took leave of the Army, and the Sixth Corps was paraded to bid him farewell. He bade his adieus to the music of drums, cannon, and cheers. He looked sad as he rode along the lines, and many were

moved to tears as he passed. Altogether it was sad and affecting. The news of Seymour's election, too, coming at this time, is especially dispiriting. We are still (13) at New Baltimore, and I presume our quietude is to enable the new Commander to seize the reins with a firm hold. We have heard firing beyond Warrenton today, but know nothing of its import.

November 15. Still quiet at New Baltimore, and the weather is delightful. It is rumored that Franklin is to have command of a Grand Division, to consist of two or three corps, in which case Smith will have the Sixth Corps, and Howe the Second Division. Captain Wheeler is reported at Warrenton, and if so he will soon be here. He has been absent since we were at Fort Monroe, and his long absence has furnished occasion for unfavorable comment in certain quarters.

THE FREDERICKSBURG CAMPAIGN.

November 17. We left New Baltimore early yesterday morning, and encamped last night about two miles east of Catlett's Station. This morning we started again at 6.30 o'clock, and marched about fifteen miles; which brings us to a point about fifteen miles N. N. W. of Fredericksburg. On the 18th we moved to Stafford C.H., and camped in a dry woods near an old brick church. Our base of supplies is at Acquia Creek, seven miles distant. Captain Wheeler has returned to the regiment, and on the 22d had a trial for absence without leave before a military commission. I was, of course, summoned as a witness. The weather is bad and we are "Stuck in the mud."

November 24. The Grand Division organizations have been perfected and Franklin has the Left Grand Division, Smith the Sixth Corps, and Howe the 2d Division. The Left Grand Division comprises the 1st and 6th Corps, the 1st being commanded by Reynolds. The 21st is in the 1st Corps, and I paid that regiment a visit yesterday in company with Dr. Mulford and Captain Wheeler, where I saw Mart Clark, but spent most of my time with Captain A. L. Wheeler, who is about the only officer left there of my particular acquaintance. Captain W. F. Wheeler has been dismissed from the service for absence without leave. He was one of our best officers, and his dismissal is one of those unfortunate combinations of circumstances that often happen in the service. I hope the order will be revoked, as it is, in my opinion, a most unjust and cruel judgment. I believe that there was some neglect to present the case properly before the Commission, and that, further, a re-hearing should be demanded by Captain Wheeler on that ground.

November 26. Lieutenant Bliss returned from leave, and brought me a package from home containing gloves, stockings, etc. Tomorrow will be Thanksgiving Day, and we are making some extra preparations for dinner on that account, though nothing very elaborate can be served, as we are not in a region of abundance. However, we shall have a roast turkey and some potatoes, both sweet and Irish, so I fancy we'll get along without starving some way. The weather is unfavorable for military operations, the frequent rains having made the roads almost impassable.

November 30. This being the last day of the month I am busy with the monthly reports, which I have always to make up. Dr. Hall is now Surgeon-in-Chief of the Brigade, Dr. Mulford, who was holding the place by virtue of seniority, having resigned and gone North. On Friday, the 28th, I went to Acquia Creek Landing to draw medical supplies for the Brigade, and saw Tom Dewey off for home, his resignation having been accepted at last. He was one of our best subaltern officers and Colonel Bidwell told me he would recommend him for Captain of Company D, if he would remain. I hear that Captain McLean is on recruiting service in Elmira. Lieutenant Charles O. Shepard, of the 82d New York Volunteers, has also resigned, and he went North on the same boat with Tom Dewey; so I bade them good-bye at the wharf, wishing them much joy upon their release from the dangerous and irksome duties of field service. Dr. Oliver Adams, brother to Dr. N. H., came down to the Army with Lieutenant Bliss the other day, and I understand he has been appointed Assistant Surgeon in one of the New York Regiments, the 78th I think. The weather is better than at the last record, but the roads are still horrible, impassable for heavy trains and artillery. Colonel Bidwell's health is quite poor, and I fear will break down completely if we have an active campaign.

December 4. The weather is bright, and we are under orders to move at eleven o'clock A. M. today, rumor says to Belle Plain, below Acquia Creek Landing. December 6: we left our camp near Stafford C. H. day before yesterday as expected, and as our baggage train did not arrive until late into the night, we were without tents. Yesterday we moved four miles again, but the artillery and trains did not get up until noon of the 7th. I was out of doors all night the 5th, without cover of any kind excepting my overcoat, and it was the most severe night I have experienced in the service. I revolved before a big camp fire all night long, but it was so cold I could not sleep a wink. The ground is covered with snow, and the ambulances are stuck in the mud

for miles along the road. My horses have had no grain for two days, and I have lived during that time on hard bread, with short allowance at that. Four men died in the ambulances yesterday while we were on the march. Just before our last move I was detailed to the medical charge of the Division ambulance train when on a march, which adds to my duties and responsibilities very much. It is the duty of the Medical Officer in charge of the train to examine all passes given to the sick, and to pick them up if he approves of their authority to "Fall out," and to minister to their wants or necessities during such march.

December 8. We are at Belle Plain, or near there, but quiet—in fact, we cannot move on account of the mud. This is the most trying campaign we have experienced, yet I am in good health and gaining in flesh all the time. December 10. Still at the same place, though we have been under orders to march at a moment's notice since yesterday, with three days' cooked rations and sixty rounds of ammunition, which looks like a fight. Lieutenant Gilman has gone home on leave; he is a faithful, deserving officer, and I am glad he has been allowed this indulgence.

December 13. I have been appointed Recorder of the 2d Division Hospital, Sixth Corps. We moved down to the Rappahannock night before last, and crossed the river yesterday morning early on two pontoon bridges, about two miles below the town of Fredericksburg. Our hospital is located at Mansfield, Bernard's Mansion, on the South Bank of the river near the bridge head. We had a battle today in which the 49th lost ten or twelve men, mostly wounded. Lieutenant Bliss was slightly wounded in the head—the only officer struck. Sumner's right Grand Division suffered a heavy loss, we hear, having made repeated assaults upon the enemy's strong position in front of the town. It is expected the battle will be renewed in the morning. I sent my letters by the correspondents of the *N. Y. Times* and *Tribune*, who come to the hospital to get the lists of killed or wounded, and accord me that privilege in return for courtesies shown them. This is a great advantage, as we have no mail facilities during a battle.

December 14. The battle was not renewed today as expected, General Burnside having countermanded the order which he first gave, to do so. General George D. Bayard, of the Cavalry, was struck by a solid shot while in conversation with General Franklin, and I had him brought in immediately. He was on the lawn in front of the hospital when it happened, and I was standing on the steps at the time. The shot rolled along and expended its force against the foundation walls of the building. The injury is a mortal one, and it is doubtful if he lasts out the day.

December 16. We remained quiet during the 14 and 15, except the usual skirmish firing and an occasional gun, and last night recrossed the Rappahannock in safety. We are now on the north bank about one and a quarter miles from the river, having been busy all night in removing and caring for the wounded. We seem to have been fortunate in extracting ourselves from a bad box. The battle of Fredericksburg will always stand in history, as a monument to the folly, and incompetency, of the second commander of the Army of the Potomac.

December 18. I was ordered to take the wounded of the 2d Division to Washington. They were collected at Falmouth and put aboard of the cars, whence they were transported by rail to Acquia Creek, where we arrived about eight o'clock in the evening. Two transports at anchor off the landing were brought to the wharf, and the transfer of the wounded to the boats was accomplished by three o'clock A. M., whereupon we steamed for Washington, arriving there by seven o'clock. The wounded were fed by the Sanitary Commission's agents while they were transferring to the ambulance, but it was three o'clock P. M. before they were all off for their various hospitals. Up to this time I had not eaten anything since leaving Falmouth the night before, so I was nearly famished; but I made haste for a good hotel where I soon obtained the needed food and rest. The troops had not been paid since June, and I was quite out of money; so I availed myself of this opportunity to visit the Pay Department, where I drew four months' pay on the 20th, sending \$300.00 home by the first express.

FAREWELL TO THE 49TH.

I remained in Washington until the 23d, for rest and recuperation, starting back for the Army on the latter date. Arriving at Falmouth late in the evening, I rode to Franklin and Smith's headquarters in one of General Smith's headquarter wagons which I found at the station. Here I obtained supper about nine o'clock, and remained over night as the guest of Dr. Basil Norris, the Medical Director of the Left Grand Division. Next morning, the 24th, I made my way on foot to the camp of the 49th, about a mile and a half distant, and on my arrival there I found a letter from Dr. Vanderpoel, Surgeon General of the State of New York, promoting me to be Surgeon of the 57th Regiment New York Volunteers.

Thus it came about that, after fifteen months' service as Assistant Surgeon, I found myself suddenly invested with the full rank of Surgeon, and not yet quite twenty-four years old. This seemed to present the opportunity for me to obtain a leave of ab-

sence, which, as I had not been thus indulged since entering the service, I thought myself entitled to. Therefore, armed with my letter of promotion, I took myself back to Grand Division Headquarters, and presented the case to Dr. Norris, knowing full well he would do all in his power to aid me. The orders at this time in force on the subject of leaves of absence for officers were very strict, but Dr. Norris took the letter in to General Franklin and stated the case to him. Franklin, though a disciplinarian, was a kind officer, but was powerless to act, no matter how deserving the case, in the face of positive orders; and this was the report Dr. Norris brought back to me. I then suggested to Dr. Norris that I could resign as Assistant Surgeon, to accept promotion. He asked Franklin how that would do. The General readily assented to such a plan, stating he would approve such a paper, and that I might take the responsibility of going home upon that authority, though suggesting that the visit be a short one.

These negotiations consumed the day the 24th, and as the next day was Christmas nothing was done; but on the 26th I sent up my resignation as indicated, which came back duly approved on the 27th, and the necessary order was issued. (This paper will be found among my military files.) In the meantime, on Christmas Day, I visited the 136th New York, which was lying near Falmouth, seven miles away, where I met many old acquaintances—Gad Parker, John McCray, John Boyd, Dr. Edwin Amsden, and others. Dr. A. was anxious to be promoted to Surgeon, as he had been in service sometime; and I am persuaded that he did not altogether enjoy himself with his superior, who was Dr. B. H. Hovey, now of Rochester. I engaged to speak a word for him to Surgeon General Vander Poel, in case I got away as expected. Another object of this visit to Falmouth, was to ascertain something of the 57th, which I understood was encamped near there. I saw the regiment in its camp, and learned that it belonged to the First Division (Hancock's) Second Corps. I did not pay it a call, lest, if I did, my plans for going home would be spoiled.

Sunday was the 28th, and I spent the day in packing up, bidding good-bye to the officers and men, and in otherwise preparing to leave Monday morning, December 29th, bright and early, I bade adieu to the 49th after fifteen months' continuous service with it, and sped my way to Falmouth Station to take the train to Acquia Creek. When the time finally came to depart I was loth to go, for I had many friends who were tried and true, whereas, in my new field, I was a total stranger, not having a solitary acquaintance in the regiment. However, go I must, no matter

how regretfully, and go I did, with many a kind expression from both officers and men of the old 49th. From Acquia the boat carried me up the Potomac to Washington, where I arrived near three o'clock P. M. I was anxious to reach the Pay Department before the office should close, so took a carriage at the Sixth Street wharf and drove rapidly to the office, where I had my resignation paper properly endorsed for pay by E. H. Brooke, the Chief Clerk. He referred me to Major Rochester (now Paymaster General) for payment; but by the time I reached his office it was too late. He was just closing up for the day and asked me to call the next morning, when he would pay me my balance for November and December, 1862. But I was impatient, and took the evening train for New York without waiting for pay. I reached New York on the morning of December 30, spent the day there in obtaining a new uniform to correspond with my increased rank, Major of Cavalry, and proceeded to Albany the same evening, where I arrived at ten o'clock P. M. I took rooms at the Delavan House, and next morning proceeded to the Capitol to interview the Surgeon General, Dr. S. Oakley Vander Poel.

I found Dr. Vander Poel in his office at ten o'clock A. M., and had a pleasant visit with him for half an hour. This was the last day of the year, and also his last day in office, as Governor-Elect Seymour would take office the next day, and, of course, appoint a Democrat to succeed Vander Poel. I took occasion to thank him for his kindness to me in various ways, and particularly in looking after my interests in the way of promotion before he left office. He replied that it was his policy, as far as possible, to promote all the old Assistant Surgeons before retirement, and that my record was such as to merit what I had received. I then told him how I had succeeded in getting away from the Army for a visit home; whereupon, he smilingly said that I had better make the visit as brief as possible, so as to give his successor no cause for complaint. I said I would return at the end of twenty days, which was the usual length of leaves of absence to officers. Finally, I asked him to promote Dr. Amsden before retiring, but he said that would now be impossible, as it might look like forestalling the action of the new Surgeon General if he made appointments of promotions on the last day of office, whereupon the interview terminated. I enjoyed Dr. Vander Poel's personal friendship in after years, meeting him often at the State Medical Society, and we rode together from Albany to New York only a few days before his death, which occurred March 13, 1886. I took the afternoon train for the West, arriving at Lancaster about midnight, where I persuaded the conductor to let me off, as the

train did not make a regular stop there. It was nearly one o'clock when I reached the house and awoke my wife who, up to this time was unaware either of my promotion or of my coming. My son Frank was then nearly three years old, and even at that late hour was aroused by my arrival, when we all had a happy meeting.

New and Non-Official Remedies

FORMIC ACID AND ALLIED COMPOUNDS.

Formic acid (24.25 per cent. of absolute acid). While considered analogous to acetic acid as irritant and antiseptic, but "more so," the Council deprecate its internal use. Externally, it is counter irritant, 1% in alcohol or alcohol and water. By this method, it is a more controllable substitute for the time-honored bee-sting method.

Sodium formate. (See above) 10—25 centigrams (1½—4 grains.)

Methylene dicotoin (Fortoin). antiseptic, especially in putrefactive diarrhoea. 25 centigrams (4 grains).

Formalin gelatin (Glutol) dusting powder.

Trioxymethylene (Paraformaldehyde) is a polymeric condensation of formaldehyde, in powder form. It is generally used to prepare formaldehyde by heating but may be used internally, 1-3—1 gram (5—15 grains) well diluted or in 10% suspension in collodion as an escharotic for warts, etc.

NUCLEIN AND ALLIED SUBSTANCES.

Nuclein ½—1 gram (7½—15 grains).

Nucleic acid 6—30 centigrams (1—5 grains).

Sodium nucleate same dose.

DIETHYL BARBITURIC COMPOUNDS.

Diethyl-barbituric acid, (Veronal) hypnotic 1-3—1 gram (5—15 grains).

Sodium diethyl-barbiturate (Medinal) (Veronal-sodium) same dose.

TANNIN COMPOUNDS.

Albumin tannate (Tannalbin) 1—4 grams (15—60 grains).

Tannyl acetate (Tannigen) 20—60 centigrams (3—10 grains).

Bismuth bitannate (Tannismuth) 30—60 centigrams (5—10 grains).

Tannin formaldehyde (Tannoform) 25—50 centigrams (4—7½ grains), externally full strength or diluted with talc to half or quarter strength or 10% in ointment or soap.

Hexamethylene-tetramine-tannin (Tannopin) 30—50 centigrams, (5—7½ grains).

Ellagic acid (Gallogen) 30—50 centigrams (5—7½ grains).

Eucalyptus gum (Red gum) 10—30 centigrams (1½—5 grains) in trochee.

Tannin nucleo-proteid (Protan) 50% combination of casein and tannin. 3 centigrams to 2 grams (½—30 grains) according to age, frequency of dosage and degree of diarrhoea.

VALERIC ACID COMPOUNDS.

Amyl valerate especially for biliary colic, 20—40 centigrams (3—6 minims) every half hour or 1 c.c. (15 minims) t.i.d.

Borneol valerate (Bornyval) actually forms a large part of natural oil of valerian. 25—75 centigrams (4—12 grains).

Menthyl valerate. (Validol is menthyl valerate plus 30% of free menthol) gtt. x—xv.

Validol camphoratum, Validol plus 10% camphor, same dose.

Diethylamine valerate (Valyl) supplied in pearls, owing to oxidation in air. Dose 2—3 pearls of 2 grains each.

COCAINE ANALOGUES.

(Alpha-eucaine) triacetaminamine derivative, withdrawn from market.

(Beta-eucaine) tri-methyl-benzo-oxypiperadin. Prepared as hydrochlorid and lactate, the latter more soluble. Analogous to cocaine but neither mydriatic nor vaso-contractor and stable even on boiling. 1—10% in instillation, injection, ointment, etc., according to location &c.

Holocaine hydrochlorid, is phenitidyl-acetphenitidin hydrochlorid. Quicker than cocaine, with added antiseptic action and said not to produce scaliness of cornea. 1%.

Homatropine hydrochlorid and hydrobromid mainly used as mydriatics. 1%.

Methylatropine nitrate (Eumydrin). Less toxic than atropine, and as mydriatic, prompter and less prolonged action. Slightly larger dose and stronger solution than atropine.

Euphthalmin. (hydrochlorid) Mydriatic without anesthetic action and with very little action on accommodation and tension. 5—10%. General action similar to atropine.

Tropacocaine hydrochlorid. local anesthetic, prompter and more prolonged action and less toxicity than from cocaine, less mydriatic. 3—10%.

(Novacaine) hydrochlorid and nitrate (latter for combination with silver) less toxic and prompter than cocaine, but less sustained unless combined with adrenalin. ¼—20% solutions, ac-

cording to area anaesthetized, etc. Internal dose up to $\frac{1}{2}$ gram ($7\frac{1}{2}$ grains).

(Alypin) Local anaesthetic, without mydriasis or disturbance of accommodation. 1—2% in eye; 1—4% for injection anaesthesia; 10% externally.

(Stovaine) similar to alypin. 2 milligrams (1-30 grain) internally; up to 4% in eye; 5—10% on mucous membranes; 1% for injection anaesthesia.

OTHER LOCAL ANAESTHETICS.

(Anaesthesin.) Ethyl paramido-benzoate. 30—50 centigrams ($5-7\frac{1}{2}$ grains) in gastric ulcer, hyperaesthesia and vomiting or in suppositories. 4—10% ointment or dusting powder; 3% spray up to 50% local application on mucus membranes.

Ethyl amino-benzoate. Insoluble, otherwise used similarly to above.

(Orthoform New) Insoluble, similar to above.

(Orthoform New, hydrochlorid) soluble 10% in water.

ABSTRACTS

MENIERE'S DISEASE. H. Bourgeois, *Le Progres Medical*, October 21, 1911. During the paroxysm, confinement to bed, darkness and quiet, blister or leeches to affected side, mustard foot baths, ether inhalations, ice compress to the epigastrium for nausea, chloroform water, etc.

Immediately after the paroxysm: a drastic cathartic, anti-syphilitic measures if indicated—efficient in a very small proportion of cases; 606 is not advised in unilateral deafness but only in bad bilateral cases where there is everything to gain and nothing to lose.

Later treatment—after three or four weeks: Hypodermic injection of pilocarpine, $\frac{1}{4}$ centigram at a time, waiting ten minutes for salivation and sweating, and repeating if it does not occur till the limit of tolerance is reached—usually $\frac{1}{2}$ centigrams. For children, the dose varies from 2 to 5 milligrams. Having established the tolerable dose, the injection is repeated daily for 12 to 24 days. If at the expiration of this time, the hearing is not improved, it is useless to continue. If the result is favorable, the course consists in 30 injections.

SUB-CUTANEOUS INJECTION OF OXYGEN. Felix Ramond, *ibid.*, reports success with the method and cites Beraud's Thesis. A rubber balloon filled with oxygen is attached to a Pravaz syringe

and the injection is made into the cellular tissues, as of the abdomen. The amount varies from a few c.c. for local asphyxia (gangrene) to 2 or 3 liters, repeated several times a day for general asphyxia. The author, on account of the difficulty of making even compression on the balloon, advises connecting it with a thermo-cautery bulb, the latter being refilled at its inlet from another balloon of oxygen.

VON JACKSCH ANEMIA.

DR. E. P. A. FICKLEN, of New Orleans, in the September, 1911 issue of the *N. O. Med. & Surg. Jour.*, reports a case of this rare condition, as follows: The oldest sister of the patient died at the age of nine months with the same symptoms as the patient. Three other children healthy. Patient born of Sicilian parents, at term, seven months old, healthy up to age of two months, then gradually developing pallor and hebetude. No emaciation nor edema nor lymphatic enlargement. Broncho-pneumonia. Liver firm, not tender, extending to umbilicus in median line. Spleen extended $2\frac{1}{2}$ inches below costal arch. Death five days after first examination by reporter, no necropsy.

Blood Examination: Hemoglobin, 10% (Tallquist scale).

Color index	.2
Red cells per c. m. m.	2,380,000
White cells per c. m. m.	250,000

Differential Count:

Small lymphocytes	67%
Large lymphocytes	10%
Large mono nuclears	3%
Basophiles	2%
Neutrophiles	16%

The report also remarks: "Apparent leucocytosis, poikilocytosis, polychromatophilia, anisocytosis, normoblasts, and megoblasts. A few myelocytes, all of them neutrophilic, were seen in one specimen. In several specimens, normoblasts undergoing mitosis, were found."

INJECTIONS OF CAMPHORATED OIL IN SURGICAL AFFECTIONS.—P. Baudet (*La Province Medicale*).

Baudet strongly recommends the oil injections in all surgical infections, the pneumonias and enteritis in children. The oil is a powerful cardiac stimulant and also possesses an antitoxic action.

In general, he injects 1c.c. of camphorated oil 10-100, two or three times a day. In grave infections the dosage may be in-

creased to 50c.c. injected morning and evening, i.e., 100c.c. in 24 hours or 10 grams of pure camphor.

A Roux syringe is used and the oil is prepared according to the formula given by M. Valdiguier, Chief Pharmacist, Hotel Dieu.

1,000 c.c. olive oil are mixed with 300 c.c. 95% alcohol to remove the free acids, repeatedly shaken, allowed to stand 24 hours and decanted. This operation is repeated three times. The final product is carefully heated on a sand bath to remove all traces of alcohol.

100 grams of camphor are dissolved in 900 grams of the washed oil, filtered, placed in 10 and 20 c.c. ampules and sterilized in the autoclave. Each ampule contains $\frac{1}{2}$ grams of pure camphor.

Hirschel of Heidelberg, in desperate cases of peritonitis from perforation, pours 100-300 c.c. of the oil into the peritoneal cavity before closing the abdominal wound. His object being to lubricate the abdominal contents, obstruct the lymphatics and delay absorption. He claims two actions for the drug, first bacteriocidal and second, mechanical in closing the lymphatic orifices; comparing its action to that of balsam of peru in infected wounds.

W.W.Q.

LEUCO-PROPHYLAXIS IN ITS APPLICATION TO ABDOMINAL SURGERY—O. L. Botero—*La Semana Medica*, Buenos Ayres, August, 1911.

Bottaro uses horse serum, and nucleinic acid 2% for this purpose. The serum is administered subcutaneously in doses of 10 c.c. or applied locally to the peritoneal cavity. The nucleinic acid is used in a similar way.

He has injected 30 c.c. of a 0.50% solution of the acid into the peritoneal cavity per vaginum and cul-de-sac of Douglas. The injections are made 18-24 hours before operation and are followed by no appreciable disturbance.

According to his experiments, following the injection of these substances there is a diminution in the number of leucocytes in the general circulation and an enormous increase in the number present in the peritoneal exudate.

W.W.Q.

PETERKIN in an article entitled, "Urologic Facts," *International Journal of Surgery*, September, 1911, emphasizes the fact that the urethral walls are collapsed when at rest but when distended the canal has a capacity of 25 c.c. He questions the value of a 2 drachm syringe in medicating the entire surface of

the canal and advocates the use of a douche bag and a glass nozzle.

He also insists that a full bladder is essential when palpating the seminal vesicles. The mechanics of cystocele and its relation to retroversion of the uterus and laceration of the perinaeum are also discussed.

The October number of *The Medical Council* contains an article by Bogart entitled, "One Venereal Menace." He mentions a venereal specialist in a university town who has treated one third of all the students in a single year and his records show that 90 per cent. of the graduates have been under his care in the past.

Another physician who practiced for 30 years in the vicinity of a co-educational school informs him that venereal diseases are rampant among the students of both sexes.

What stronger argument for instruction in sex hygiene, can one find than this.

Immunity of Nurslings to Certain Infectious Diseases

By DR. G. VARIOT, in *La Clinique Infantile*

IT is a well known fact that the resistance of nurslings to the morbid germs of most of the infectious diseases, which act vigorously, is very intense among children two years of age. It is rare to find children less than a year old in tents where the contagious diseases, measles, scarlet fever, diphtheria, etc., are isolated.

Dr. G. Variot from cases occurring in the *Hospine dépositaire des Enfants assistés* and other institutions of Paris, has collected and is collecting interesting data on the morbidity of the newborn. In the former institution are confined more than 2,000 children less than one year old, who have been either abandoned by their parents, or in temporary trust.

MEASLES.

Dr. G. Variot cites several cases observed by different men, among whom are Vogel and Sydenham. They found that the nursling, kept to its room and imprisoned in its swaddling clothes almost all day, is thus more protected against infection than the four or five year old child.

Another, M. Hutinel, in his treatise on the diseases in childhood, states that the new born is exceptionally affected by contagion. Children now in contact with disease are less often susceptible to it than others. Yet cases are recorded by Sevestre, where nurslings did not contract measles during the infection of their nurses. Immunity of children, is not always absolute; for

in an epidemic of measles among nurses who were caring for very young children, all had a light eruption, a very attenuated measles. But the transmission of measles is rarer than smallpox.

STATISTICS ON THE DISEASE.

At the Children's Hospital of Chatillon, Sous Bagneux; not one case of measles was observed in the last 4 years.

At the Pasteur tent; out of 241 children under one year only two cases of measles were observed: one 5 months old, which died, and the other 10 months old.

The total number of cases of measles among nurslings up to one year of age, admitted to isolated tents during the last 4 years:

1908—1 measles, 6 months, cured; 1 measles, bronchopneumonia, 11 months, died.

1909—1 measles, 11 months, cured; 1 measles, bronchopneumonia, 9 months, died.

1910—1 measles, bronchopneumonia, 7 months, died; 1 measles, 10 months, cured.

1911—1 measles, 8 months, cured.

The general total of cases of measles is about 1,375 for these 4 years, and are distributed as follows:

Age, 1-2 years—282 cases.

Age, above 2 years—1086 cases.

Age, below 1 year—7 cases.

SCARLET FEVER.

Again, Billard believed that scarlet fever is more prevalent in late childhood and in adolescence than among nurslings. He saw during the year 1826, three children from one year to 15 months old, seized with scarlet fever, while not one of the younger children were affected.

In the great epidemics nurslings are almost always spared. Thus in that of Saalbourg (1785), Washington (1827), Halle 1818), Hanau (1819), the children did not contract the disease (Virot). However rare scarlet fever may be in early childhood, it is nevertheless sometimes observed among the new born (Ferrario, Tortual, Portier).

Welch and Schaumberg of Philadelphia, in their treatise "Acute Contagious Diseases," say that age is a very important factor in susceptibility to scarlet fever. Children under one year show to a lesser degree, a predisposition to contract scarlet fever. This is more true of children under six months, and among children under three months, scarlet fever is extremely rare. They have found that out of 5,000 cases of scarlet fever, admitted to the municipal hospital of Philadelphia, about 1 per cent. concerns children less than 1 year old.

Out of the 1,272 nurslings sent out to the Children's Hospital of Chatillon, only one case of scarlet fever was observed in four years.

There has been no more than one case under one year in the tents for contagious diseases, out of 164 cases of scarlet fever.

A Case of Congenital Duodenal Aresia

By FRANCIS ROE and ERNEST H. SHAW

In La Clinique Infantile

A DOCTOR was called to see a woman aged 36, upon her third pregnancy. On his arrival the woman had borne a male child, well constituted. Labor had been easy, and there was need of a nurse only an hour before delivery.

Mother or nurse did not complain of anything abnormal concerning the baby, except that it did not appear to take the breast with much appetite. Four days later, the baby cast up its milk and brown substances. The child appeared well and no alarm was felt. The next day the child died suddenly. All the preceding night and day the child had vomited considerable quantities of brown substances and had a number of stools during the evening.

The doctor was unable to certify the cause of death, and obtained permission to examine the body. There were no external signs of disease, except a distention and hardness of the abdomen. The lungs and heart were normal. The distended stomach occupied the whole abdominal cavity; towards the pyloric extremity there appeared a constriction with a protuberance containing a brownish liquid substance. The intestines were not distended. The other organs were normal.

Upon the examination of a piece comprising the stomach and duodenum stuffed with cotton and fixed in the normal position he found: A large stomach with a a very serrated constriction at the junction of the superior 2-3 and the distal 1-3; the opening of the oesophagus in its normal position and at the other extremity a narrow tube issuing from the middle of an extremity in the caecum; the narrowed portion of the stomach was the pylorus, for a well marked muscular ring about 1-3 inch large represented the pyloric sphincter. The dilated portion on the other side was the duodenum, which gradually dilated till it formed a tube $1\frac{1}{2}$ inch in diameter, then terminated abruptly, where the lumen of the duodenum was completely obstructed. From the exterior of the caecum, the part was a narrow tube with a thin wall, about $\frac{1}{4}$ inch in diameter. The mucous membrane was irregularly wrinkled. There was a slight external

constriction at the union of the two parts. The appearance presented by this narrow tube issuing from the dilated portion of the duodenum resembled the appendix issuing from the caecum. Only towards the pylorus was the duodenum covered by peritoneum. A narrow duct stained with bile penetrated the posterior part of the duodenal wall just at the beginning of the narrow part; a hair could be introduced into the tube. But it could be made to penetrate into the lumen of the intestine. This was the common bile duct and must have existed as the passage during foetal life since there was meconium. But it was difficult to demonstrate because of hardening. Another tube on the side of the preceeding served to represent the pancreatic duct. A hair could be introduced into the tube but did not pass into the duodenum. On the interior of the pylorus was found a depression, narrow and deep, about 5-16 inch long by 2-16 inch deep, perpendicular to the large axis of the pylorus and separated from the origin of the duodenum, by a bridge of mucous membrane $\frac{1}{8}$ inch large. A piece of it was cut and the mucous membrane was seen to dip in deeply; the appearance of the section leading into the depression recalls the section of a laryngeal ventricle. The pyloric sphincter about $\frac{1}{8}$ inch thick terminated brusquely at the duodenal junction, descended gradually towards the cardia. The stomach was very dilated and its walls hypertrophied. The lesser curvature was $2\frac{1}{2}$ inches long, from the oesophagus to the pylorus. The greater curvature was 7 inches. The greatest width from the lesser to the greater curvatures was $1\frac{3}{4}$ inches. The duodenum was 2 inches long, from the superior extremity of the duodenum to the constriction, $3\frac{1}{2}$ inches to the inferior extremity.

MICROSCOPIC EXAMINATION.

At the bottom of the depression of the pylorus is an opening of a large branched duct, covered by glandular cells. Around this duct are large bands of gland tissue, irregularly distributed. The glandular mass seems to have penetrated the depth of the muscular wall. The specimen is interesting and rare. Professor A. Keith, who has sought for literature on this malformation has found seven other observations. He cites the opinion of Bland Sutton that Atresia is probably consistent with the development of embryonal cells of the liver and pancreas and that it is produced at the junction of the two morphologic parts of the alimentary canal: the anterior and lesser grooves. Forster says that the duodenal segment of Vater is closed by the proliferation of its epithelial lining, during the greatest part of the second month. If the epithelial obstruction is not destroyed in proportion to development, an occlusion at this point is produced. The specimen

has been deposited at the museum of the Royal College of English Surgeons.

From La Clinique Infantile (1910)

THE thermic regulations in the healthy nursling and in the babe afflicted with digestive troubles.

H. Heim and M. K. John (of Budapest) state that a little pallor rise in the child's temperature is indicative of digestive disturbances; the thermic oscillations are usually accompanied by irregularities in the curve of its feet.

The healthy child reacts against external cold by a peripheral vaso-constriction; if it is left for five minutes in a room whose temperature is from 21° to 23°C, the extremities become colder, while the internal temperature, taken in the rectum, rises from 1-12° to 2-12°.

If the same is done with a child affected by decomposition, the temperature at the end of five minutes will fall about 7-10° and five minutes later about 1.2°.

From La Clinique Infantile

RESEARCHES on the influence of turnips on the quality of milk.

1. The disagreeable taste and odor of the milk of cows nourished on turnips has been found to be caused by digestive disturbances and by the difficulty which results from keeping the cows absolutely clean, and the atmosphere of the stable pure and fresh.

2. It has also been found that the acidity of the milk becomes augmented, due to the increased quantity of phosphoric acid that has passed into the milk.

3. The increased acidity of the milk gives it a greater capacity to coagulate. It is not impossible that the increased coagulability may be due to the greater amount of calcium that has passed into it.

TOPICS OF PUBLIC INTEREST

A Buffalo Hospital for Alcoholics

By GEORGE H. McMICHAEL, M.D.
Buffalo, N. Y.

THE legislature has passed, and the governor has signed a bill permitting any city of the first or second class to establish and maintain a hospital and industrial colony for alcoholics. The governing body of the institution is to consist of a board of seven members, five of whom are to be appointed by the mayor, and two of whom must be physicians.

The overseer of the poor of the city and a judge of the court which has jurisdiction over arrests for public intoxication are

ex-officio members of the board. The five appointed members of the board, are to serve for five years.

The board of inebriety is required to maintain an office, which shall always be open, and at this office to keep a record of all persons arrested for public intoxication. Whenever any man, woman or child is arrested for public intoxication the officer in control of the police station to which the arrested individual has been taken is required at once to report the name and address of the accused to the office of the board of inebriety, which board must endeavor to ascertain if he has been arrested for public intoxication within the previous twelve months. If he has not, he may sign a request for immediate release, which release will be granted. A report of the case must be sent to the court having jurisdiction over such matters. In case the accused has been arrested on the charge of being drunk within twelve months, he may upon his own application, or upon the certificate of two examiners in lunacy, or upon the petition of a relative, or the overseer of the poor, be committed to the care of the board of inebriety for a period of from one to three years. The committing power is, of course any court of record.

The statute defines an inebriate as "a person who is incapable of properly conducting himself or his affairs, or is dangerous to himself or others, by reason of habits periodical, frequent or constant drunkenness, induced either by the use of alcoholic or other liquors, or of opium, morphine or other narcotic or intoxicating or stupefying substance."

The board of inebriety has power to parole, upon such terms as it may consider suitable, any patient committed to its care. The patient so paroled will be under the supervision of the board's probation officer until such time as the board considers that he may safely be released, or until the expiration of the maximum term for which he was committed. Any paroled patient who violates the terms of his parole may be arrested by order of the board and returned to its custody. If however, the board considers that the patient is an unsuitable person for further treatment, it may apply to the court which committed him to be released from further care of him. In that case the court may fine the offender or send him to the penitentiary. The amount of the fines and terms of imprisonment depend upon the number of times he has broken his parole, and the number of times he has been arrested for public intoxication.

Some fines may be paid in instalments, and they are to be paid to the board of inebriety. The new law makes provision for the treatment and care of non-residents if the board is willing to receive them. It provides for the appointment as super-

intendent of a physician who has had at least five years experience in the practice of medicine, and it defines his duties. In every case he is required to ascertain the financial position of the persons committed to the care of the board of inebriety and of the relatives who are liable for their support. When either patient or relatives are able to contribute toward the support of the former, the superintendent is given power to fix the sum per week that is to be paid. It must not, of course, exceed the cost of the patient's maintenance. The amount decided upon can be legally collected by the processes by which superintendents of the poor are allowed to recover such sums in similar circumstances.

The city in which the hospital and industrial colony are located is required to pay for patients who have no means, but non-residents' maintenance becomes a charge upon the civil division of the state upon which they would be a charge as poor persons. An important provision of the new law is that anybody who conveys alcoholic liquor or narcotic drugs to any place under the control of a board of inebriety, or who furnishes these liquors or drugs to any persons under the control of such a board without the written order of the superintendent or of a physician connected with the institution is guilty of a misdemeanor, and may be fined any sum between fifty and five hundred dollars, or may be imprisoned for not less than thirty days.

The committee appointed by Mr. Ansley Wilcox, President of the Charity Organization: Herbert B. Lee, Chairman; George B. Burd, Dr. Arthur W. Hurd, Dr. George H. McMichael, Newman Walbridge, all coöperating with Judge William R. Brennan and Francis Almy, Secretary of the C. O. S.

As the result of the sale of liquor containing wood alcohol, in Whitetown, Ind., four men are dead, one totally and two partially blind.

The Indiana State Medical Association held its annual meeting at Indianapolis, September 28 and 29. Advance reports render it probable that defense of members against malpractice suits, has been adopted, somewhat along the lines followed in New York and other states.

HOW EPIDEMICS ORIGINATE. In November, a sailor suffering with malignant diphtheria was examined by a local physician and taken by the Charities Commissioner of Tonawanda to a Buffalo Hospital for treatment. P.S. The patient was taken in a trolley car on its regular trip. P.P.S. The matter is being investigated. We would like to comment on this item but we

cannot think of anything to say that will not readily occur to our readers and, beside, there are certain regulations concerning the matter contained in publications sent through the mail.

The Utica Tuberculosis Pavilion

THE Physicians and the Utica branch of the State Charities Aid Association held a joint meeting recently, to appoint a committee to aid in the selection of a suitable site, and to act in co-operation with the aldermen. Messrs. J. Depuyster Lynch and E. D. Ibbottson, were appointed to represent the Association, Drs. F. D. Crim and C. Gray Capron, to represent the medical profession.

Considerable difference of opinion existed as to the proper location of the hospital, our Associate Editor, Dr. Fayette H. Peck, speaking for those favoring the General Hospital Grounds; Dr. D. L. McNamara for those who preferred the more distant Dwyer site. In order not to delay action, both sides agreed not to press the choice of site.

The profession of Buffalo, having lately had a very similar experience with regard to tuberculosis, and acute contagious diseases can appreciate the problem before the citizens and profession of Utica. We trust that a satisfactory solution will be reached more promptly than has been the case in Buffalo and that a site on which all can concur, will be selected.

A Campaign Against Beats

THE National Association of Credit Men, at the meeting of its officers in Rochester, decided to raise a million dollars, at the rate of a hundred thousand a year, for the purpose of prosecuting dead beats. The expense amounts to only about \$7, for each firm represented in the membership.

This is a movement with which the medical profession will sympathize. Perhaps it will even be worth while and practicable to coöperate in some way. At any rate, the whole country will gain by it. The tax which the dead beat places on the citizen is greater than that imposed by all branches of government—at least for the average professional and business man. It is greater than the loss from honest thieves, robbers and burglars who, at least, do something to earn a living and do not sneak behind the protection of the law. And, in the long run, the dead beat himself loses more than his victim. In fact, the greatest kindness to any young man who finds it easy to borrow or to obtain credit and hard to pay, is to bring him up short and teach him that it pays to be honest.

Army Medical Corps Examinations

THE Surgeon General of the Army announces that preliminary examinations for the appointment of first lieutenants in the Army Medical Corps will be held on January 15, 1912, at points to be hereafter designated.

Full information concerning these examinations can be procured upon application to the "Surgeon General, U. S. Army, Washington, D. C." The essential requirements to securing an invitation are that the applicant shall be a citizen of the United States, shall be between 22 and 30 years of age, a graduate of a medical school legally authorized to confer the degree of doctor of medicine, shall be of good moral character and habits, and shall have had at least one year's hospital training as an interne, after graduation. The examinations will be held concurrently throughout the country at points where boards can be convened. Due consideration will be given to localities from which applications are received, in order to lessen the traveling expenses of applicants as much as possible.

The examination in subjects of general education (mathematics, geography, history, general literature, and Latin) may be omitted in the case of applicants holding diplomas from reputable literary or scientific colleges, normal schools or high schools, or graduates of medical schools which require an entrance examination satisfactory to the faculty of the Army Medical School.

In order to perfect all necessary arrangements for the examination, applications must be complete and in possession of The Adjutant General at least three weeks before the date of examination. Early attention is therefore enjoined upon all intending applicants. There are at present sixty-four vacancies in the Medical Corps of the Army.

CORRESPONDENCE

Transmission of Disease by Means of Books

THE undersigned is preparing a paper upon "Books as a source of disease" to be read before the next "International Congress of Hygiene," and in order to obtain data, respectfully requests the readers of this note to send him an account of any cases, the source of which has been traced to books or papers, or in which the evidence seemed to make books or papers the offender. He would also further request information where illness or even death has been caused by the poisons used in book-making.

All the information possible is wanted to present as complete a paper as possible. As in the case of insects which we now know to be "carriers of disease," it is first necessary to collect the scattered evidence in order to show that there is real danger in books; and this will compel better care to be taken of libraries and books and improve the health of mankind.

WM. R. REINICK,
1709 Wallace Street,
Philadelphia, Pa.

OUR CONTEMPORARIES

American Medicine, October 1911, discusses editorially the work of the Erie County Medical Society (sic) and of the New York Academy of Medicine in regard to fee splitting and says that surgeons of surprisingly high standing are guilty. An apology is offered for not printing names—the discredit which would be brought to the profession.

American Medicine also calls attention to the relation of latitude to typhoid, suggesting that a fair comparison of different cities should discount this factor. However, we scarcely agree with the implication so far as a comparison of American and European or east and west coast American cities are concerned as the north-easterly trend of ocean currents counteracts about 10 degrees difference in latitude.

THE *American Medical Journal* of St. Louis, (eclectic), October, 1911, notes rather sarcastically, the contemplated merger of the Barnes, P. & S. and American medical schools and foretells their destruction. As, last year, their combined registration was 274, it would seem that by joining forces, a good, strong college might result.

The same journal accuses the *Journal of the A.M.A.*, of stealing eclectic thunder in advocating the use of certain drugs which the eclectics have used for nearly a hundred years. But did not the plain, ordinary, unspecified physician whose successor is now termed allopathic by his opponents, use these same drugs a thousand years ago? The regular profession calls itself so with an apology for the implied superiority and counts among its numbers, the Indian medicine man, the African herb doctor, the mediaeval empiric, every practitioner of the healing art who has conformed to the standards of his time and environment and who has not voluntarily separated himself from the rank and file of his profession. If it comes to stealing thunder, how about that word *Eclectic*?

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR .

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

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Will your biography be written in verbs or adjectives?

The Future of the Pharmacist

THE first issue of *Successful Medicine*, a bright, interesting journal devoted to the business side of medicine, and edited by H. R. Harrower of Chicago, contains an article the gist of which is that, "It pays to dispense." We do not need to recapitulate the arguments on this matter. In a narrow sense and under certain local conditions, it does pay to dispense, just as it pays to prescribe over the counter. In the broad sense of the ultimate welfare of all parties concerned, it does not pay for any man to do that for which he is not specially trained and to take some other man's business from him.

With the present overcrowded conditions of both the medical and the pharmaceutical profession, and the growing scarcity of money in proportion to its purchasing power, it is inevitable that the keen competition for a living should result in violations of ethical principles, among the members of each profession and that the effects should be felt within and across professional lines. But we must maintain our ideals and make the economic conditions fit the ideals instead of lowering our ideals to fit an economic disturbance of supply and demand which can be corrected. This is especially true because, however much the individual may gain in a low financial sense from disregarding principles of ethics, no lowering of standards will produce any genuine improvement.

There are certain details, however, in which common sense—which is always good ethics—requires a readjustment of standards. First of all, we must face the fact that the modern *materia medica* contains a great many valuable remedies and a great many elegant and convenient preparations of old drugs, which can not be manufactured in a retail drug store. The pharmacist must, therefore, act as the retailer of package goods. In the country and, to some extent in the city, economy, convenience and promptness of supply, compel the physician to dispense to a greater or less degree.

Secondly, the time-honored liquid mixture of principal drug, corrigent, adjuvant, and vehicles, has very largely given place to condensed medication in which tastelessness, directly or indirectly secured, has proved superior to older nations of palatability, and in which one drug is given at a time, for its own effect, in a dose that may be regulated from time to time without regard to that of adjuvants.

Thirdly, even within the memory of physicians still in active practice, drugs have gradually given place to mechanic, electric and other imponderable therapeutic agents and such drugs as are used, are being applied locally by the physician himself.

We do not mean to imply a disbelief in drugs. Many diseases are distinctly perversions of bodily chemistry; obviously they demand chemic correction. Moreover, while the ultimate explanation is not known, the fact remains that many drugs produce mechanic and chemic effects on various vital organs. We are inclined to believe that, while many drugs have been discarded and while we have learned that the use of others has been based on misconceptions or may properly yield to other measures, at no time have drugs, properly prepared and used with discrimination, produced such satisfactory results as at present.

But, the fact must be faced squarely that the old use of complicated prescriptions has been greatly curtailed and that it must continue to decline. There are two ways of solving the problem for the druggist. The easiest way is for him to relegate his profession to still greater obscurity, pushing his prescription counter farther and farther to the rear, and making it smaller and smaller, giving greater and greater attention to the business of soda water, cigars, magazines, postal, express, gas, laundry and other agencies, stationery and toilet articles and the like. Some druggists have already solved the problem so satisfactorily in this way that they say openly that they do not care an obstruction to a stream of water-n, whether they get prescriptions or not. This is an undignified solution but a few weeks of European travel rather tend to convert one to the view that the

type of American drug store, with its many conveniences, is something to be retained, even with its quack medicines. The latter, indeed, have a conservative value in acting as fool killers and in reducing certain patients to the point at which they are glad to accept skilled medical attendance.

The second way of solving the problem is for the druggist to study critically the advance of medical science and art and to meet the new demands made upon him or, rather, which may be made upon him if he will prepare for them. For example, he might secure quite a little business merely by keeping track of new remedies, inquiring as to the likelihood of their use in his own community, putting them in stock or, at least arranging for their delivery more promptly than the physician can secure them on direct order. Co-operation would help in this regard.

Another development of pharmaceutic demand is well illustrated by salvarsan. This is the year 1911. More is required of almost every profession and trade in this year than in 1811, vastly more than in 1711. It ought to be possible to send a prescription for salvarsan, ready for use, to any drug store, in 1911, with the same confidence of its prompt and proper preparation, as for laudanum in 1811. Einhorn's heads and packets for intestinal tests belong in the same category. Salol and keratin coated pills are another example. Suppositories and bougies of gelatin, cocoa butter, etc., are another. The fact that expensive and troublesome apparatus for preparing salvarsan are advertised in medical journals to physicians shows that the pharmacist is blinding his eyes to a proper and ultimately profitable extension of his scope.

The words pharmacist and chemist used to be almost synonymous. Can the physician telephone to his druggist for a decimal solution of sodium hydrate, or a 1 per cent. solution of a reagent or drug for local use, and be sure of accuracy? Some time ago, we wrote a prescription for a certain extract, in definite amount. We weighed it in its container, soaked it in alcohol, dried and weighed the box and label, subtracted, and found an error of 25 per cent.

Has the druggist even weights and scales and graduates of sufficient accuracy for even approximate clinical determinations? Can he analyze urine in a suspected case for arsenic or morphine—fairly simple chemic examinations? Can he prepare extemporaneously, chromic catgut, aseptic dressings, etc?

We are writing in no fault-finding mood. We merely wish to impress on the pharmaceutic profession that there is a vast field of usefulness and profit requiring a development of special skill, along logical lines and into which it is practically forcing the medical profession to enter. And, meantime, the former profes-

sion is complaining of the non-support of the latter and trying to entice him back by a display of elixirs and 4-ounce mixtures which are almost out of date and which any one with a fairly accurate balance and a 25 cent graduate can compound.

A Sane Christmas

WE wish our readers a Merry Christmas. Let us remember that there is something more to the Christmas spirit than mere giving and receiving, merriment, and overeating and overdrinking. Some men show their Christmas spirit by pinning mistletoe to their shoes. The country has with surprising rapidity, developed a relatively sane Fourth of July. It is equally important to develop a sane Christmas. The former has been marked by a decided diminution of casualties, especially of tetanus. Let us not forget that, next after the diminution of infectious disease and direct risk of violence, conservation of health and life depends upon diminishing the general wear and tear of existence. It is not improbable that Christmas, as at present celebrated, causes more deaths from exposure and fatigue among postal and express employees, clerks and others, than have ever been due to fire works.

Aside from this, it is worth considering that a hysteric extravagance in purchases, largely of useless articles, concentrated within a few weeks of the year, disturbs normal business, produces poverty and suffering, and ultimately costs health and life. Many of us have witnessed the passing away of the old-time, kindly visiting on New Year's day, because the custom reached a point of intolerable excess. It would be a pity to lose the Christmas observation too. Let us be warned in time and remember that Christmas is a day sacred to the home, the children, and the poor.

Many a shrewd physician has discontinued the natural issuance of bills at the beginning of the year, realizing that Santa Claus has levied so high a tax on his clientele that he will scarcely collect enough within the month to pay for the postage. This is an accurate index of the economic disturbance brought about by the tendency to excess in Christmas giving. It is not stinginess but true generosity to demand a sane spirit at Christmas, to eliminate extravagance, and sacrifice of family duty and charity to the worthy poor, on the altar of social ostentation.

PERSONAL

DR. A. C. HILL of the State Health Department spent several days in November, visiting the schools of the Tonawanda Reservation, near Akron.

DR. A. T. BACON of Canaseraga was badly bruised and cut by being thrown from a hand car which jumped the track. A septic condition has developed but we trust that it will not prove serious.

MR. C. J. ELBERFIELD, Treasurer of the Memorial Hospital, Niagara Falls, reports good results from the Colonial Fair held in November.

DR. GEORGE F. COTT of Buffalo, attended the Congress of Surgeons in Philadelphia in November.

DR. HENRY R. HARROWER of Chicago, Editor of *Physiologic Therapeutics* and of *Successful Medicine* called on us during November.

DR. JOHN GROMANN of Utica has returned from a three months' European trip, having visited many hospitals in England, France, Germany and Italy and having attended the Esperanto congress at Berlin.

DR. CHARLES VAN BERGEN of Buffalo, gave an illustrated talk on his travels through the Holy Land, at the Church of the Good Shepard, November 6.

DR. FREDERICK FRISCH of Buffalo returned from a trip to Atlantic City, November 7.

DR. BERTHA STONEMAN of Wellington, S. Africa, visited in Buffalo during November.

DR. WILLIAM H. MANSPERGER of Buffalo, has returned from a trip to Philadelphia and New York, having attended the Surgical Congress.

DR. NATHALIE KAVALEFF MANKELL has opened an office in the Professional Building, Buffalo, specializing in medical gymnastics and other physical methods of treatment.

DR. HENRY C. BUSWELL of Buffalo, entertained at dinner, at Statler's Hotel, Tuesday, November 14, in honor of Dr. Joseph

L. Miller of Chicago. The table was arranged in the form of a section of the hypophysis, in reference to the subject of Dr. Miller's paper before the Academy of Medicine.

DR. J. C. THOMPSON of Buffalo, addressed the Mothers' Club in November.

DRS. M. P. MESSINGER and N. O. Brooks of Oakfield, were the guests of Dr. Benjamin A. Gipple of Alden, late in October.

DR. GEORGE R. STEARNS of Buffalo was in New York for a week about November 1.

DR. ROSWELL PARK of Buffalo gave a stereopticon lecture on the Hospital Knights of St. John of Jerusalem, before the University Club of Buffalo, October 28.

DR. JACOB GOLDBERG of Buffalo has been appointed to membership on the municipal board of school examiners by Mayor Fuhrmann.

DR. JAMES MOONEY of Buffalo will give a series of song recitals mainly of Schubert's compositions, at his home, during the winter. This is a pleasant and unusual phase of laryngology.

DR. WILLIAM SOCH of Dunkirk attended the meeting of state health officers in New York, late in October.

DR. GEORGE J. ECCLE of Buffalo, has resigned as physician in charge of the Tuberculosis Dispensary, on account of pressure of private practice. Dr. Clarence L. Hyde, who has been Tuberculosis Inspector in the Health Department will succeed him but will spend a year in travel with leave of absence. During this time, the position will be filled by Dr. Harry N. Feltes.

DR. WILLIAM F. JACOBS will spend several months in California. At latest notice, he was the guest of Dr. William A. Dean of Ontario, Cal.

DR. EDWARD B. SCHWARTZ of Buffalo has moved to 1618 Fillmore Ave.

DR. HARRY M. WEED is in possession of the case-records of the late Dr. Alvin A. Hubbell.

DR. H. R. HARROWER of Chicago and Dr. A. Crandall Way of Perry Center have recently visited the editor.

MAYOR FUHRMANN has most wisely reappointed Dr. Francis E. Fronczak, Health Commissioner of Buffalo, for five years. This is an honor which has been well earned by sound judgment, fearlessness and hard work.

DR. MONTGOMERY E. LEARY of Rochester, was operated on November 20, for general peritonitis following a perforated appendix. At this writing he is still in critical condition.

DR. H. N. IMBODEN of Rochester, formerly of Clifton Springs Sanatorium has been appointed Roentgenologist at Iola Sanatorium, the Monroe County Tuberculosis Hospital. X-Ray examinations of the lungs will be a special feature of the clinical investigation of the cases.

DR. JOHN R. WILLIAMS gave an address, well illustrated with lantern slides, on Modern Conceptions of the Physiology of Digestion before the Rochester Academy of Science on November 27.

DR. EDWARD CLARK OF BUFFALO and Dr. B. W. Sherwood of Syracuse are the speakers at a joint meeting of all the physicians of Monroe County at East High School, Rochester, N. Y., on Saturday, December 2. The meeting is held at the suggestion of the State Health Department and is followed by a Public Mass Meeting in the evening.

DR. MYRON A. KING of Rochester, is recovering from an operation for the relief of a strangulated hernia.

DR. HELEN P. MOREHOUSE-KENNEDY of Buffalo, is attending lectures in the University of Munich as a "hörer."

Buffalo is well represented at the University of Berlin. Drs. Carroll J. Roberts, Charles A. Bentz, John L. Eckel and Frank A. Valanti are attending and report that they are much pleased with the opportunities for work.

DR. L. H. SMITH of E. Aurora, spent part of November at Clifton Springs.

DR. CHARLES E. WELCH of Westfield, returned November 4, from a trip to Denver.

OBITUARY

ELOQUENT tributes were paid to the memory of the late Colonel William Warren Potter, M.D., who conducted this JOURNAL so long and so ably, at the fall meeting of the American Association of Obstetricians and Gynecologists. Dr. Potter had been Secretary of this Association for many years. The memorials by Drs. McMurtry and Reed were especially touching, showing warm personal friendship as well as an appreciation of Dr. Potter's professional, literary and official services.

DR. CHARLES W. M. BROWN died at Elmira, October 29, 1911. He was graduated from the Harvard Medical School, 1876. He had been a vice-president of the Medical Society of the State of New York.

DR. JOHN H. MILLER of Niagara Falls died of apoplexy, November 10, 1911. He was a graduate of Bellevue, 1896, and was 50 years old.

DR. ANTOINE F. VADEBONCOEUR of Syracuse, died November 9, 1911, of apoplexy. He was born in Louisville, Quebec, 57 years ago. He was a neurologist and especially interested in the therapeutic value of music.

DR. BENNET T. WELCH of Buffalo, died of typhoid fever, October 29, 1911. He was a graduate of the University of Buffalo, 1907.

REAR ADMIRAL JOHN YEATMAN TAYLOR, U.S.N., retired, formerly Medical Director, committed suicide in Washington, November 16, 1911. He was 82 years old, a graduate of Jefferson, 1852, and had seen service with Farragut during the Civil War. His death was attributed to the killing of his son by an automobile, two years ago.

DR. ALEXANDER HUGH FERGUSON of Chicago, whose partnership with Dr. Monahan, we noted last month, died of diabetes October 20, 1911, aged 58. He was a Canadian, an honor graduate of Trinity, 1881.

DR. PHILIP F. CASEY, of Oakland, formerly San Francisco, Cal., died October 1, 1911, of heart disease, aged 57. He was a graduate of Buffalo, 1882.

DR. EUGENE WASDIN died in a sanitarium near Philadelphia, November 19, 1911, aged 53. Dr. Wasdin had long been a member of the U. S. Public Health and Marine Hospital Service. In 1901, he was stationed in Buffalo and assisted in the care of President McKinley.

DR. WALTER WYMAN, Surgeon General of the same Service died at Providence Hospital, Washington, November 21, 1911. We feel a sense of personal loss in the death of these scholarly gentlemen. The writer was appointed to the service in 1900 but did not serve, on account of personal and business reasons. However, the acquaintance formed through this interest in the service has lasted over many years, with frequent meetings.

DR. WILLIAM D. MCGILL, a graduate of Harvard Homeopathic, Cleveland, 1880, and a resident of Buffalo, died at Eden, N. Y., November 25, 1911.

DR. WILL McCaw of Geneva, died at Albuquerque, N. M., November 16, 1911. He was 48 years old and a graduate of P. and S. 1888.

SOCIETY MEETINGS

Important Amendments

THE Medical Society of the County of Erie held an adjourned meeting October 20, 1911, at which Dr. Edward E. Haley, Chairman of the Committee on Contract Work, submitted a detailed report of his committee, as a result of which the following resolution and amendments to the by-laws, submitted by the committee, were adopted:

1. *Resolved*, That the proposed amendment shall not apply to present contracts, but shall prohibit any extension or renewal of the same.

2. Add a section to Chapter II of the Constitution and By-laws to be known as Section 13, and to read as follows:

"No one shall become a member of this Society or continue as such, who engages in contract-work, unless it be governmental in character, but this shall not prohibit an agreement for a particular case nor apply to examinations for an adequate fee."

Also the following recommendations:

- 1st. That the President appoint, from time to time, at his own discretion, special committees to use their influence on any

man who continues this unethical practice, whether he be a member of this Society or not.

2d. That a special committee be appointed to assist the membership committee to devise ways and means to induce all desirable men to join the Society.

3d. That the proper authorities of this Society bring this matter to the attention of the State Society for the purpose of gaining its support.

The Secretary was directed to send a copy of these resolutions and amendments to each member of this Society, and to also send a copy to every lodge, organization, firm or corporation employing medical service by contract.

Amendments to the By-laws creating a sinking fund were adopted as follows:

Amend Chapter 12 so that caption shall read "Dues and Finances" instead of "Dues."

Amend by adding to Chapter 12 two sections to be known as Sections 4 and 5 which shall read as follows:

Sec. 4. After paying all outstanding floating indebtedness, all money derived from dues and in excess of one hundred dollars (\$100.00) that remains in the treasury at the close of each year (December 31), as well as such other moneys as this Society may, from time to time, direct, shall be deposited in savings institutions designated by the Council, to the credit of a fund to be known as the "Permanent Fund of the Medical Society of the County of Erie."

Sec. 5. No money shall be withdrawn from the Permanent Fund of the Medical Society of the County of Erie, except by a two-thirds vote of the members present at a regular meeting, and provided that notice of intent to move for such withdrawal shall have been approved by the Council and a copy thereof sent to each member with the notice for the meeting at which such withdrawal will be considered."

Nominations of officers were made, the election to take place at the annual meeting on the third Monday in December.

Phi Alpha Gamma Convention

SIXTEEN years ago, seven students in the New York Homeopathic Medical College and Flower Hospital got together to

form a small social club for the mutual benefit of its members. By one of those peculiar coincidences that we often observe, similar small clubs were formed in Boston University Medical School and in Hahnemann Medical College of Philadelphia, neither one of which knew of the organization in New York.

In 1897 these three local clubs were fused into one intercollegiate fraternity under the name of the first one to be formed.

The fraternity idea spread rapidly, until within a very few years chapters of the new society were founded in over a dozen colleges scattered from the Atlantic to the Pacific, and its members now number, including undergraduates and alumni, over two thousand.

Within the last two or three years there have been formed Alumni Chapters of the organizations in cities where sufficient members were located. Such chapters now exist in Boston, New York, Philadelphia, Chicago, Buffalo, Rochester and Cleveland. The convention of the fraternity just ended is the first one to meet as the guests of an Alumni Chapter, all previous ones having been held in some city where there existed an active chapter in a college.

The Grand Chapter meets annually in convention, each active chapter sending two delegates and each alumni chapter sending one. The officers of the sixteenth convention are: Grand President, Dr. A. D. Carpenter, Buffalo; Grand Vice-President, Dr. H. B. Kinyon, Ann Arbor, Mich.; Grand Secretary-Treasurer, Dr. Richard H. Street, Chicago. The officers of the Buffalo Alumni Chapter are Dr. G. R. Critchlow, President; Dr. C. L. Hyde, Secretary Treasurer. The local chapter numbers fifteen members, several of them residents of surrounding towns.

The business of the convention occupied two days and a half, November 16, 17 and 18. On Thursday evening was held a smoker and vaudeville performance at the German-American Café, and the annual Banquet was given on Friday evening at Hotel Statler. The next convention will be held at Cleveland as the guests of the Cleveland Alumni Chapter.

G. R. CRITCHLOW.

Annual Meeting Sanitary Officers of the Association of New York State

THE New York State Sanitary Officers' Association, made up of the fourteen hundred Health Officers of the State, held its 3d annual meeting at the Hotel Astor, New York City at 2.00 o'clock Tuesday afternoon, October 24. The officers for the ensuing year were elected as follows:

Frank Overton, M.D., Patchogue, President.

Vice-Presidents:

Louis M. Brown, M.D., Purdy's Station.

Daniel S. Burr, M.D., Binghamton.

Louis E. Couch, M.D., Nyack.

O. J. Hallenbeck, M.D., Canandaigua.

William B. Stanton, M.D., Webster, Treasurer.

Montgomery E. Leary, M.D., Rochester, Secretary.

Over one hundred members were present and an exceedingly interesting program was presented. Several of the speakers dwelt upon their experiences in the practical application of the present sanitary laws and it was the opinion of the Association that the present code is inefficient and inadequate. Health Officers are afforded practically no real protection. One instance was cited where a Health Officer was put to the expense of nearly \$1,000.00 in defending a suit which the court eventually threw out—"No cause for action."

The Attorney General has expressed an opinion that the local Boards of Health—Village or Town—have no right under the present law to incur an expense for articles destroyed by Health Officers. The position of a Health Officer is thus made not only possibly expensive but very incapable of accomplishing much where opposition is not.

Revision of the Sanitary Code.—The State Department of Health through Commissioner Eugene H. Porter, Deputy Commissioner William H. Howe and Secretary Alec H. Seymour, has pledged its hearty support in co-operating towards securing the necessary revision. President Frank Overton is selecting a Legislative Committee of five with himself and the secretary as ex-officio members, which will immediately take up this rather formidable task. It will require not only much labor but much time to complete. The codes of various states will be studied and the good points of each adopted. This will be the beginning of placing New York in the front rank in sanitary work.

This is the first instance we know of where the actual revision of the sanitary laws will be undertaken by the organized effort of the Health Officers in co-operation with the State Department of Health. It is hoped by adopting this means to secure a nearer approach to the ideal than has been accomplished in the past. In New York State last year there were five members of the Legislature who were physicians and much pioneer work was accomplished by the Public Health Committee of which they were all members.

This revision will be an expensive undertaking, and it is hoped the Health Officers of the State will realize its importance and

do their part toward bringing the work to a successful issue. It is not expected to be completed inside of two or three years.

The Sanitary Officers' Association meeting was held the day previous to the usual conference of State Sanitary Officers, which was also well attended; over eight hundred being registered. All declared themselves unusually pleased with the New York meeting, as it affords unusual opportunities for instruction and investigations. It is hoped that Commissioner Porter will see fit in future to hold the conferences in New York at least every alternate year.

THE Medical Society of the County of Niagara held its annual meeting at Lockport, November 15. With the coöperation of the State Department of Health, a public meeting was held at which Dr. W. D. Alsever of New York spoke of various common ways of spreading infections. The following officers were elected: President, Dr. E. S. N. Ringueberg of Lockport; Vice-President, Dr. C. G. Leo-Wolf of Niagara Falls; Secretary, Dr. L. R. Hurlburt, Cambria; Treasurer, Dr. W. A. Scott, Niagara Falls; Censors: Drs. H. H. Mayne and F. J. Baker of Lockport, and F. Guillemont of Niagara Falls; State Delegate: Dr. C. L. Preisch, Lockport; 8th District Branch Delegate: Dr. E. B. Horton, Niagara Falls.

The I. C. I. Chapter of the Nu Sigma Nu Fraternity held its annual smoker at German-American Hall, Buffalo, November 13, 1911.

The December meetings of the Buffalo Academy of Medicine are scheduled as follows: December 5 (Surgery) Unusual Phases of Acute Perforating Gastric Ulcer, Dr. Ellsworth Elliott, Jr., New York.

December 12 (Medicine) Short History of the Ernest Wende Hospital and Differential Diagnosis of Infectious Diseases, Dr. Walter S. Goodale; Treatment of Infectious Diseases, Dr. Jesse N. Roe.

December 19 (Obstetrics and Gynaecology) Pregnancy and Childbirth as Factors in the Production of Rectal Diseases, Dr. D. C. McKenney; Obstetric Adjuvants, Dr. George R. Stearns.

December 26 (Pathology) Pathology of Pneumonia, Dr. William McCallum, New York.

BOOKS AND AUTHORS

The Principles and Practice of Bandaging, by Gwilym G. Davis, Philadelphia. Published by P. Blakiston's Son & Co., Philadelphia, 1911. 128 pages, illustrated with 164 cuts, \$1.00.)

This is a very complete, systematic and compact treatise, well printed. As there are few controversial points and little opportunity for originality in this branch of surgery, comment is unnecessary. The only suggestion that we can make in the nature of a criticism is that for the use of medical students, it would be a little more convenient to have such a book of pocket size.

Surgical Applied Anatomy. By Sir Frederick Treves, F.R.C.S., Sergeant-Surgeon to H. M. the King, Late Lecturer on Anatomy at the London Hospital. New (6th) edition, thoroughly revised. Pocket size, 12mo, 676 pages, 137 illustrations, of which many are in colors. Cloth, red edges, \$2.50, net. Lea & Febiger, Philadelphia and New York. 1911.

This familiar little red book, has been revised by Arthur Keith, M.D., LL.D., but retains the graphic style of the original author. It is so well and favorably known in earlier editions that we need only say that it is what it purports to be and that it leaves practically no room for a rival in the same field.

A Manual of Pathology and Morbid Anatomy, by T. Henry Green, M.D., F.R.C.P., London; eleventh edition, revised and enlarged by W. Cecil Bosanquet, M.A., M.D., F.R.C.P., London. Lea & Febiger, Philadelphia and New York, 1911. 642 pages, 350 illustrations, \$4.50.

Forty years have elapsed since the first edition appeared. The history of scientific pathology is epitomized in the history of this standard text book. The book and the science have grown together. Its author has not only recorded but helped to make the advances of the science.

Recipes, compiled by Clara S. Lord, 1321 M. St., N. Y., Washington, D.C. 96 pages, paper covers, for sale by the author, 50 cents, post paid.

We review this book hastily as a glance through its pages gives an appetite that must be satisfied. It includes, but is by no means limited to the broths and pastes so often considered appropriate for the sick and convalescent. Miss Lord has evidently grasped the fact that a person in need of careful feeding needs nutriment and that nutriment means the use of ordinary food stuffs, properly prepared. It would not be advisable to turn the book over to a nurse to choose at random from its pages for every convalescent; it would be even less advisable to allow carte blanche for an acute case as of typhoid. Many of the recipes

would be appropriate for persons in health and the general idea of the book is to afford a wide range of dainties, dainty ways of serving substantials, and novelties, out of which a discriminating choice may be made for those whose appetite needs stimulation.

Lippincott's New Medical Dictionary, second edition, 1911. Edited by Henry W. Cattell, A.M., M.D., J. B. Lippincott Co., Philadelphia. 1100 pages, freely illustrated, limp leather, thumb index, \$5.00.

This is smaller than the usual large dictionary, due to the use of tough, thin paper, clear but rather small type and judicious condensation. A novel feature is the inclusion of biographic notes and portraits. While much collateral information is given, the editor has wisely stopped short of the attempt at a cyclopaedia. In the explanatory notes, we read that "There are not a few medical terms which are formed contrary to scientific principles of word formation. These errors, where they occur, are pointed out and the correct forms are given." However, there is no disposition to split hairs, and the dictionary is of things as they are rather than as they ought to be. For example, while the word *appendicitis* is properly criticized, *penischisis* appears without an apology and, while we find the correct term *nesteostomy*, in its proper alphabetic place, there is no reference to it under *jejunostomy*, where it is really needed as so few writers use the correct form, that most physicians would have difficulty in finding it.

These are minor defects, if indeed they are really defects at all in a dictionary, which should record actual usage rather than ideals.

Electricity. Medical and Surgical, by Dr. Charles S. Potts of Philadelphia. Published by Lea & Febiger, Philadelphia and New York, 1911. 509 pages, 356 illustrations and 6 plates; \$

Section 1, on the general physical principles of electricity is written by Horace Clark Richards, Ph. D. and, while freed from technicalities, affords a clear conception of the general theory. Section 7, on the *x*-rays, is contributed by Dr. Henry K. Pancoast. The intervening sections cover, in a thorough manner, the physiologic effects, and diagnostic and therapeutic uses of the various electric currents. If we were asked to point out the special points of superiority of this work over others, we should answer: the uniform clearness of typography and illustration, to be credited to the publishers, and the avoidance by the author of the tendency to concentrate on some of the newer applications of electricity and to make it a mere picture gallery of *x*-ray investigations. In other words, it does ample justice to methods no longer novel but deserving retention and aims to furnish the physician with a complete working manual.

Manual of Pathology, including Bacteriology, the Technic of Post Mortems and Methods of Pathologic Research, by **W. M. Late Coplin, M.D.**, Philadelphia. Published by P. Blackiston's Son & Co., Philadelphia, 1911. Fifth edition, 1139 pages, 612 illustrations and 12 plates, 11 colored. \$4.50.

In reviewing so large a work, it is impossible to call attention to its excellence in detail. The author's and the publishers' reputations stand behind it.

Currents of High Potential of High and Other Frequencies. Second edition. By **William Benham Snow, M.D.** Author of "A Manual of Electro-Static Modes of Application, Therapeutics, Radiography and Radiotherapy," "Therapeutics of Radiant Light and Heat and Convective Heat," Editor of the Journal of Advanced Therapeutics, late Instructor in Electro-Therapeutics in the N. Y. Post-Graduate School and Hospital, etc. Published by the Scientific Authors' Publishing Co., 329 West 57th St., New York. Price, \$3.00 net.

This work has been entirely revised, rewritten and enlarged. Forty cuts have been added, and the chapters on High Frequency Currents and Therapeutics have been revised and entirely rewritten. The work contains the results of the author's personal researches and investigations, and includes most that is valuable on the subject of High Potential Currents. The developments in the subject of Hypertension and its treatment by the d'Arsonval current, as well as the employment of direct d'Arsonvalization in the treatment of infection, has been entirely considered in this edition.

The Origin of Life, being an account of Experiments with Certain Superheated Saline Solutions in Hermetically Sealed Vessels, by **H. Charlton Bastian, M.D., F.R.S.**, London. Published by G. P. Putnam's Sons, New York and London, 1911. 118 pages, 10 photo-micrographic plates, \$1.50. This is one of the Science Series, prepared in such a way as not to be popular in the ordinary sense and yet sufficiently free from technicalities to appeal to any intelligent student of nature.

The author makes a strong plea for the spontaneous development of the simpler forms of life, both on the evidence of experiment and on the probability that evolution from geologically ancient bacteria would, by this time, have resulted in marked deviation from the original types. He also raises the question as to why we should admit, as we must, the development of living forms at some distant period and deny it for the present. Such a question is unanswerable for the evolutionist of extreme type, and, on reflection, equally so for the man who accepts creation in the limited personal sense. The scientific world has scarcely had time to recover from the overwhelming surprise at the results of such experiments, to view them without bias.

In this connection, it may not be out of place to call attention to the fact that negative results of certain experiments in regard to spontaneous generation, as well as the apparent lethal influence of pure water on living organisms may be due to minute quantities of copper, etc., in distilled water. As one professor in charge of a biologic department of a university said in reply to a question as to the principal line of investigation of his assistants, the main immediate issue seems to be to produce a pure H_2O .

Sex in Relation to Society, Vol. VI. *Studies in Psychology of Sex.* By **Havelock Ellis**, F. A. Davis Co., Philadelphia, 1911. 656 pages. Cloth, \$3.00.

The publication of this volume, the last in the series of studies in the Psychology of Sex, completes thirty years of study on this important subject, by the author, who ranks among the foremost authorities on this question. The first five volumes previously reviewed in the *BUFFALO MEDICAL JOURNAL* at the time of publication of each, treat of the various forms of expression of the sexual impulse as experienced subjectively in the individual without regard to his surroundings or associations. Naturally there has been much that is unpleasant and even repulsive in the kinds of sexual inversions discussed. In fact, the publication of the first volume years ago in England, led to the social ostracism of the author and the prohibition of its distribution in England, so that Ellis was obliged to print the remaining five volumes, the present included, in America and Germany.

But whatever criticism may be justly or unjustly made of these volumes, the present one deserves commendation. It treats essentially of sexual man in relation to society and discusses clearly the problems of sex in the space of chapters where other authors require volumes. The essential topics treated of are: The mother and the child, sexual education, the valuation of sexual love, the function of chastity, the problem of sexual abstinence, prostitution, the conquest of venereal disease, marriage and the science of procreation—to none of which exception should be taken if read in the scientific spirit in which the work is written.

Whatever our own individual opinion may be of the author or his work, there is no question of its place in the literature of sex psychology. Physicians, as well as clergymen, who have these problems confronting them, could profitably peruse the book, even though there may be serious objection as to placing it in the hands of the average layman.

This volume, as well as its forerunners, can be purchased separately.

Anders' and Boston's Medical Diagnosis. Octavo of 1175 pages, with 443 illustrations. By **James M. Anders, M.D., Ph.D., LL.D.**, Professor of the Theory and Practice of Medicine and of Clinical Medicine, Medico-Chirurgical College, Philadelphia; and **L. Napoleon Boston, A.M., M.D.**, Adjunct Professor of Medicine, Medico-Chirurgical College, Philadelphia. W. B. Saunders Co., Philadelphia. Cloth, \$6.00 net; half morocco \$7.50 net.

This volume is a carefully prepared scientific treatise on the important subject of Medical Diagnosis. It is written in collaboration by one of America's leading clinicians and a laboratory worker of known worth. Consequently, both the clinical features and laboratory methods are equally emphasized. To the older practitioner accustomed to give undue prominence to the distinctly clinical side of a case and the more recent graduate apt to err on the laboratory diagnosis, the work is equally useful as it acts as a check on the conservatism of the former and the enthusiasm of the latter.

The method in which each division is treated is both rational and practical. Particularly advantageous are the "Summary of Diagnostic Features, the Laboratory Findings and Differential Diagnosis," all of which are stated clearly, concisely and as succinctly as the work will permit. Moreover, the book is fully illustrated, there being numerous plates—some in color, all of which will be useful to emphasize and illustrate the special point or feature which it demonstrates.

The section on Nervous Diseases covers about 200 pages and is from the pen of Dr. Thomas H. Weisenburg, a well known neurologist of Philadelphia. In general treatment, this section conforms to the use of the work. Special mention should be made of the moving pictures which portray the tabetic gait in Locomotor Ataxia, the spastic gait in lateral sclerosis, the attitude and tremor in Parkinson's Disease, the tremor in multiple sclerosis, etc. This is a new feature in pictorial presentation in medical books and will be found very useful.

After careful perusal of the work, the reviewer is perfectly frank in stating that he finds everything to commend and nothing to criticize in this work. The book surely fills its place in medical literature and should prove indispensable to the student and practitioner.

A Mother's Guide. A Manual for the Guidance of mothers and nurses by **Francis Tweddell, M.D.**, New York. Published by **James T. Daugherty**, 411 W. 59th St., New York City; 190 pages, \$1.00.

This is a very handy little compend, by no means unworthy of the physician's attention. It is indexed and marginal head-

ings facilitate reference. It may well be advised for the guidance of mothers, with such marking of chapters and verbal cautions as the particular case requires.

Case Histories in Neurology, E. W. Taylor, A.M., M.D., Boston. Published by W. M. Leonard, Boston. 305 pages. \$3.00.

We have recently reviewed another book in this series, calling attention to the general excellence of the plan of systematic clinical presentation of facts. The present book gives a brief resume of diagnostic methods and types of paralysis. The first 23 cases described cover diseases of the peripheral nerves—mainly, of course, designated neuritis. Section 2, through case 58, deals with the spinal cord; section 3, through case 91, with the brain, including hemiplegias, tumors, abscess, syphilis, etc.; section 4, through cases 109 includes diseases of vague or undetermined pathologic basis, such as chorea, paralysis agitans, myxoedema, Meniere's disease, etc.; section 5 treats of psychoneuroses.

The cases are selected not so much with the idea of presenting types, as with that of illustrating by actual examples, problems in differential diagnosis, therapeutics, etc., liable to occur in anyone's practice and affording difficulties beyond the preparation of elementary treatises. At the same time, care is taken to illustrate types and not merely to exhibit an array of rare cases. Careful reading of such a work gives exactly the form of mental gymnastics that is requisite to develop professional strength of judgment.

The Fourth Physician, by Montgomery B. Pickett, A. C. McClurg & Co., Chicago, 1911; 144 pages, several illustrations in color. \$1.00.

This is a pretty Christmas story, telling of the change of heart of an ambitious and rather mercenary young physician who lost—in both senses—just the rare case which he was most anxious to get to try his new method. It is especially designed for a gift book and, between the lines, we read the high estimate which the author has of the average physician.

Manual of Physiology, for students and practitioners, by H. Willoughby Lyle, M.D., B.S., F.R.C.S., London. Published by Oxford University Press, London, 1911. 750 pages, 1 colored plate and 135 figures. \$4.00.

The now quite lengthy list of ferments, the less vague description of the haemopoietic organs, the references to hormones, the inclusion of a number of facts derived from clinical demonstration and careful, practical, experiments as well as from chem-

istry and microscopy, in place of former theories are a good example of the progress of physiology. The practitioner of medicine cannot as a rule take time to read prolix and abstruse literature but he certainly should read such a book as this, every few years. To many, it will be a surprise to learn how practical physiology has become and what a wealth there now is of definite knowledge.

The Practitioners Visiting List for 1912. An invaluable pocket-sized book containing memoranda and data important for every physician, and ruled blanks for recording every detail of practice. The Weekly, Monthly and 30-Patient Perpetual contain 32 pages of data and 160 pages of classified blanks. The 60-Patient Perpetual consists of 256 pages of blanks alone. Each in one wallet-shaped book, bound in flexible leather, with flap and pocket, pencil with rubber, and calendar for two years. Price by mail, postpaid, to any address, \$1.25. Thumb-letter index, 25 cents extra. Descriptive circular showing the several styles sent on request. Lea & Febiger, Publishers, Philadelphia and New York.

The Medical Record Visiting List for 1912, \$1.50 and upward, according to size and binding. Wm. Wood & Co., New York. This pocket and desk companion has become so well established as to require little in the way of comment. There are the usual inclusions of dosage, treatment of poisoning and other emergency cases, obstetric tables and the like. In these days in which the economic side of practice has become so important, we need not emphasize the value of an immediate, careful entry of professional services, nor the fact that this book reduces such labor to the minimum.

The American Illustrated Medical Dictionary, 6th revised edition by Dr. W. A. Newman Dorland; published by the W. B. Saunders Co., Philadelphia, 1911. 986 pages, 323 illustrations, 119 in colors, \$4.50 without; \$5 with thumb index, flexible leather. This edition contains over 7000 new terms. A convenient detail is the capitalization of proper names only. Every word is pronounced and defined exactly without reference to another heading. Phrases are explained under the corresponding nouns. Anatomic and analogous tables are given so that the reader obtains not merely a definition but very complete information on a subject. Veterinary and dental terms are included.

MISCELLANY

THE U. S. Department of Commerce and Labor reports 5 aeroplanes exported to Canada in the first quarter of the fiscal year beginning July 1, 1911; and eight imported, seven from France and one from England, during the same period. The total value was over \$50,000. A few years ago, air travel, except in a balloon at the mercy of the wind, was a joke. It is now an accomplished fact at a cost in money not much higher than for an automobile of medium grade and with every indication that the cost can be reduced below that of a run-about. The risk is scarcely higher though somewhat more prompt than for automobile racing. It is not unreasonable to expect that air travel will be on a practically useful and fairly safe basis, though with limits as to economic factors, within ten years. Speaking of risk, deaths due to automobile accidents have, for several years, been approximately equal to all those due to rail roads and trolleys, although probably hundreds of times greater per passenger mile. We are inclined to believe that the liberation of money by these deaths, has had a greater influence than anything else in postponing and mitigating the inevitable hard times due to rise of wages and curtailment on a large scale of the productiveness of labor.

THE PERILS OF BRONCHITIS.—It is for the aged and anemic, that bronchitis has grave perils. The possibility of a severer infection grafting itself on the primary bronchial inflammation at once points to the wisdom of instituting treatment whose purpose will be to enrich the blood stream and add resistance to the tissues of the body.

Nutromel (Brown's Cotton Seed Oil Emulsion) possesses a peculiar fitness for this office; the prescriber may feel sure that the object of its administration will be fulfilled. Nutromel contains a large proportion of cotton seed oil, which is at last enjoying high favor as a reconstructive, and also the hypophosphites of lime, soda and manganese. It will aid materially in warding off the perils of bronchitis. A sample of Nutromel may be obtained by addressing Nottoc Laboratory, Atlanta, Ga.

BATTLE & Co. of St. Louis, have just issued No. 17 of their series of charts on dislocations. This series forms a most valuable and interesting addition to any physicians library. They will be sent free of charge on application, and back numbers will also be supplied. If you have missed any of these numbers, better write Battle & Co. for them before the supply is exhausted.

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ORIGINAL COMMUNICATIONS

Carcinomata of the Gastro-Intestinal Tract¹

By WILLIAM J. MAYO, M.D.
Rochester, Minn.

FROM October 1, 1897 to November 1, 1911, 1264 cases of carcinomata of the gastro-intestinal tract were operated at St. Mary's Hospital. Of this number, 863 involved the stomach, 14 the small intestine, 219 the large intestine, and 168 the rectum. These statistics show that carcinomata of the stomach form more than two-thirds of all the carcinomata of the gastro-intestinal tract. Carcinomata of the large intestine come next in relative order, and the rectum follows with a smaller number.

In the total number (859) of carcinomata of the stomach, it was possible to do the radical operation in only 307, or 34.9 per cent. of the cases. In the group of 14 carcinomata of the small intestine, five, or 35.7 per cent. of the patients were submitted to radical operation; in carcinomata of the large intestine and rectum, nearly three-fourths of the patients were operated upon radically.

These data would indicate that the stomach is the organ most frequently affected with cancer, and that only one-third of the patients submitted to operation are operated with any prospect of cure. The balance are subjected to palliative operations, such as gastrojejunostomy, gastrostomy, or to explorations.

The number of carcinomata of the small intestine is curiously small compared with carcinoma of the associated organs. The small intestine is the most primitive part of the gastro-intestinal tract, and it is reasonable to suppose that its longer heredity makes it more resistant to malignancy than the stomach and large intestine, which organs were added later in the scheme of development.

In studying the question of permanent cures following resections of the gastro-intestinal tract, we find that, of the total number of cases of cancer of the stomach submitted to radical operation, more than 23 per cent. of the patients who recovered from the operation and whose present condition has been ascer-

1. Read before the Buffalo Academy of Medicine, November 1, 1911.

tained are alive and well over five years. Fifty per cent. of patients submitted to radical operation for cancer of the large intestine, and 30 per cent. with cancer of the rectum, who recovered from operation and whom we have been able to trace, are alive and well over five years. Every case dying within the 5 year period is counted as a death from the disease, which is not fair to the statistics since the normal death rate during the five year period would approximate 8 per cent.

Taken as a whole, these statistics indicate that carcinomata of the gastro-intestinal tract, which are sufficiently localized to justify radical operations, give results which are fully as good as operations for carcinomata in other parts of the body. The pessimism of the medical profession regarding malignant disease of the gastro-intestinal tract is not justified by the facts. It is the failure to make a diagnosis during the stage when the disease is still localized, and not any peculiar malignant tendencies of the process itself, which accounts for the fatal character of cancer in this region.

The most important question in connection with the radical cure of carcinomata concerns the lymphatics, and the proof of this assertion cannot be better shown than in the results as to permanent cure after resection of the various organs of the gastro-intestinal tract. The stomach is highly supplied with lymphatics and gives the smallest percentage of radical cures. The large intestine, having the least lymphatics, gives the highest percentage of radical cures, and the rectum, with a moderate supply of lymphatics, gives better results than the stomach, but less favorable results than the large intestine.

The Stomach. If one were to drop a line vertically from the cardiac orifice across the greater curvature, the stomach would be divided into two unequal parts, the larger part, composed of the dome and fundus, has but a scanty supply of lymphatics which pass to the left to the glands lying in the splenic area, and to the cardiac glands about the esophagus. The smaller pyloric segment, has nine-tenths of all the lymphatics of the stomach. They are divided into four groups: (1) The glands along the lesser curvature, lying in the wall of the stomach itself and draining into the glands about the celiac axis. (2) Those along the greater curvature which lie with the gastro-epiploic vessels. In this region the lymphatic current passes from left to right toward the pylorus. (3) That important group lying about the pylorus, the first portion of the duodenum, and the head of the pancreas. (4) The few glands which pass with the superior pyloric vessels. The situation of these four groups of glands is definitely determined by the four blood vessels, so that early

ligation of the gastric, gastro-duodenal, superior pyloric, and gastro-epiploic vessels, not only permits bloodless operation but enables radical removal of the tributary lymphatics. Unfortunately, this glandular scheme of lymphatic drainage may be disturbed, first, because of the fact that the lymphatic drainage may be irregular, passing by some glands and emptying into more distant ones, or second, by blockage of a main lymphatic trunk, the lymph flow may be turned into by-paths leading into the pre-aortic glands. When the disease is advanced, both of these conditions may be found to exist.

The mortality following resections of the stomach is steadily diminishing; it is now from five to eight per cent., and depends more upon the patient's condition at the time of operation than upon the operation itself. Taking into consideration that, at the present time, the initial recoveries are well above 90 per cent. and that the patients who recover get a chance of radical cure something better than 23 per cent., it certainly seems incumbent upon the medical profession to make a more determined effort toward an early diagnosis.

It may be stated as an axiom that cancer as cancer in the stomach does not produce symptoms upon which an early diagnosis can be made; only when its situation makes a palpable tumor-mass or produces obstruction, can a probable diagnosis be established.

The Small Intestine. Primary carcinomata of the small intestine are exceedingly rare, and but few cases have come under our observation. Of the 14 cases reported in this series, five were in the duodenum, and none of them were operable. In two cases, the duodeno-jejunal angle was involved; both were inoperable. Of the remaining nine cases, four involved the jejunum, and five the ileum. In two of the five cases submitted to excision, the disease had begun in a pedunculated adenoma or papilloma, and in both intussusception was present.

The Large Intestine. The large intestine is a most interesting field for study. Morphologically, it begins at the ileo-cecal orifice and ends at the rectum. Embryologically and physiologically, it is composed of two entirely separate organs. Taking the gastro-intestinal tract as a whole, we find that the celiac axis supplies those organs derived from the foregut, that is, the stomach, liver, pancreas, and duodenum, down to the common duct. The superior mesenteric artery supplies all of those organs which are derived from the midgut and which are instrumental in assimilation and absorption. They are composed of the duodenum beyond the common duct, the jejunum, ileum, cecum, ascending and transverse colon as far as the splenic flexure. Ninety per

cent. of the solids are picked up in the small intestine, while 50 per cent. of the liquids and 10 per cent. of the solids are absorbed in the cecum and colon proximal to the splenic flexure. The inferior mesenteric artery supplies the derivatives of the hindgut, and the normal peristalsis, except during defecation, is anti-peristaltic. By means of mucous currents, the distal colon is intermittently engaged in passing material for further elaboration and assimilation backward into the area of midgut absorption. Under normal conditions the contents of the large intestine, as far as the splenic flexure, are fluid or semi-solid. The descending colon is usually empty, acting as a passage way only into the sigmoid where the feces become more solid in character.

Tumors of the cecum and colon, proximal to the splenic flexure, are sometimes accompanied by changes in metabolism; the nutrition of the patient often suffers and profound anemia may result. Tumors of the descending colon and sigmoid are seldom accompanied by changes in nutrition, and it is the mechanical effects of the tumor which first call attention to the patient's condition.

The surgical treatment of tumors of the large intestine is greatly simplified by the study of its embryology and anatomy. The large intestine is formed on the left side of the abdomen. The head of the colon begins to rotate at about the eleventh week. As the rotation progresses, the colon carries with it its blood vessels, lymphatics, and sympathetic ganglion, and when its normal situation is finally reached, the outer layer of mesenteric attachment is merely a peritoneal adhesion, the division of which, at any situation, enables that part of the colon to be turned upon its long inner mesenteric leaf, which contains all of the important structures.

Generally speaking, malignant disease in any part of the large intestine proximal to the middle of the transverse colon is treated best by removal of all the large intestine up to the growth, doing lateral ileo-colostomy. Beyond this point, resection in continuity, either in a one or two stage operation, is the best plan.

The lymphatics of the large intestine lie with the blood vessels, and usually are easily removed. Many times, when the lymphatics are enlarged, microscopic examination shows the condition to be the result of infection, and not of carcinomata. Proper mobilization of the large intestine, permitting one to secure the blood supply at an early stage of the disease, with careful and accurate removal of the glands, gives a prospect of cure which justifies the most extensive operations. It sometimes happens that one or more loops of the small intestine may have become adherent

and involved secondarily with the tumor-mass; as a rule this takes place along the periphery of the bowel. On a number of occasions we have first resected a loop of the small intestine; twice we have removed two separate loops, and in one instance three loops, removing the primary growth in the colon with the portions of the small intestine attached. In four cases we removed a portion of the bladder, and in 3 cases the uterus was coincidentally removed. The ultimate results of these cases of multiple resections have been surprisingly good, and we have several such patients alive and well more than five years.

The Rectum. The radical cure of carcinomata of the rectum has a bad name in surgery, which is due more to inefficient methods of operation and sentimental attempts to conserve function than to the character and location of the disease. We are coming to the conclusion that a permanent colostomy in the middle of the left rectus muscle should be made as the primary operation in the majority of cases of carcinoma of the ampulla of the rectum, and at a second operation, after the lower segment has been properly cleansed, the entire rectum should be removed from behind. This method offers the patient moderate control, with the best chance of a permanent cure. High rectal and recto-sigmoid growths will often be best approached through the abdomen or by the combined method. The perineal operation should be reserved for growths in the anal region.

The frequency with which secondary carcinomata of the liver, peritoneum, or inoperable glandular involvement occurs makes it imperative in all cases of carcinomata of the rectum and recto-sigmoid first to open and thoroughly explore the abdomen to see whether the case is one which should be submitted to operation and, if advisable, a permanent colostomy can be made at this time.

The diagnosis of cancer of the rectum is so easy that one wonders why so many patients come for consultation without a diagnosis, and why nearly 15 per cent. of them have been recently operated for supposed hemorrhoids. It is a simple matter to examine the rectum digitally, and it requires but little skill to use a proctoscope or sigmoidoscope. Neglect of these simple methods of examination not only causes disaster to the patient, but injury to the practitioner's reputation.

Lack of examination, rather than lack of knowledge, is responsible for most mistakes in diagnosis.

The Use of Intra-Articular Silk Ligaments for Fixation of Loose Joints in the Residual Paralysis or Anterior Poliomyelitis¹

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THE purpose at this time is to present a few observations, based on about a dozen cases of the Residual Paralysis of Poliomyelitis, where artificial ligaments of silk were placed in the interior of loose or "flail" joints, with the intent to limit their excessive mobility, modify malposition and secure stability in the joint sufficient for sustaining body weight.

The rationale of the treatment adopted in these cases may briefly be described as:—"A plan to restrict movement in a joint by means which shall be intra-articular, and still preserve motion in the joint."

This is accomplished by inducing an abundant exudate by means of a reactive inflammation in the joint, excited, first, by the operative trauma, and second, by the presence within the joint of a foreign substance—viz., the silk ligaments to be described. The exudates becoming organized exert a limiting effect on movement, and the strands of silk are of sufficient strength to act as check bands, when so placed, and assist in holding the leg or foot in the weight bearing axis.

The artificial ligaments are both intra-osseous and intra-articular in location, and are passed through the joint by means of tunnels, drilled through the contiguous bone-ends in certain directions. Drawn tightly and tied, while the leg or foot is in the desired position, the silk ligaments hold the articular surfaces in closer coaptation, and at the same time exert a moderate amount of correcting force, for diminishing the malposition.

In addition to their mechanical action, the silk ligaments themselves become the centres of organizing processes, eventually converting them into living tissues, that in time further reinforce the stability of the joint for carrying weight. Originally this plan was adopted to meet the demands of a number of cases presenting extensive paralysees of the lower limbs, all of which required multiple operations, and combinations of different operative procedures, to secure an effective degree of stability in the joint for the purpose of locomotion.

This plan it was believed would displace the operation of arthrodesis, especially when complete "flail-joint" conditions existed. This was deemed a great advantage, not only because

1. Read before the Buffalo Academy of Medicine, October 3, 1911.

of the frequent failure of arthrodesis, to furnish an efficient form of fixation in the knee or ankle, but also because arthrodesis is an operation inapplicable in many cases, in the lower age scale of childhood.

An extensive experience based on the results of arthrodesis, and the difficulty of obtaining a useful quality of ankylosis from its use, confirmed the views held by the writers, that rigid fixation would probably not follow the introduction of silk ligaments into a large joint. It is important to keep in mind this effect of the plan under consideration, for this form of paralysis, where a measure of regeneration of muscular power is to be looked for in many instances.

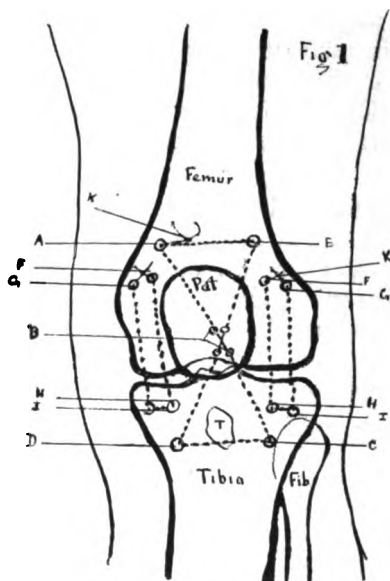
For those paralytic conditions requiring combinations of operative procedures, e. g., arthrodesis with tendon transposition, or extra articular silk strands, etc., the plan under consideration is, by comparison a greatly simplified course; it eliminates complicated and prolonged operations, and holds out quite as much promise as any of those mentioned—all of which present a somewhat large percentage of failures.

The material employed for the artificial ligament used in this connection was the parafined silk tendon, prepared in the manner suggested by Lange for tendon elongation. Number 20 Corticelli twisted silk was the size used for both knee and ankle in the earlier operations. Its tensile strength, after operation, was roughly estimated to be sufficient to sustain a direct strain of 125 pounds. For the fixation of the feet in very young children we have recently used number 14 size with satisfactory effect, and greater ease of introduction. In those cases also a very strong Kelly's Trachelorrhaphy needle has been used to introduce the silk, in place of the hand drill, greatly simplifying this detail in the technic.

The technic of the operation in the knee is as follows:

A semicircular flap is raised over the front of the knee, exposing the capsule of the joint, but not opening it. The lateral lines of the incision reach on to the condyles, the lowest part of the incision crossing the inferior border of the patella. The flap is turned up uncovering the patella and condyles. The skin below the line of incision is retracted to expose the head of the tibia as far as its tubercle, and the bone surfaces each side of that point. A hand drill is then pushed obliquely through the inner condyle, from a point near its tuberosity, obliquely across the joint and through the outer tuberosity of the head of the tibia—traversing the patella en route—emerging on the front of the

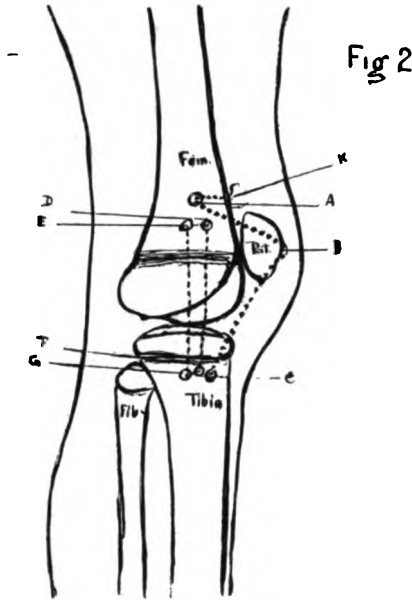
tibia, on a line with the tubercle. (Fig. 1 A. C.) After the drill enters the patella it is made to emerge on its anterior surface near the centre. Fig.1-2 B.) This is the only place where the capsule is punctured. Both ends of an aluminum wire are passed into the eye in the drill and pulled through this section of tunnel as the drill is withdrawn. The drill is again inserted in the pa-



tella near the point where it emerged, and pushed through it into the joint, and through the outer tuberosity of the tibia as previously indicated. The drill is again withdrawn with an attached piece of wire. From its point of emergence below the tibial tuberosity it is passed transversely through the compact bone of the tibia, on a line with the tubercle, to the inner side of the tibia (Fig. 1 CD.) Again withdrawn with wire attached, the drill is entered at the last point of emergence, and pushed upward through the inner tuberosity of the tibia into the joint, through the patella (with the same detail previously mentioned when traversing that bone) and then through the outer condyle of the femur, to a point opposite the place of first entrance (Fig. 1 DE); from the last point of emergence the drill traverses the compact tissue of the femur to the point of beginning (Fig. 1 EA). The drill when removed from each section of tunnel has a looped piece of wire attached and drawn into it—to be used for pulling through the silk ligament.

Each of the tunnels comes to the surface on the patella in order that the ligament may obtain leverage on that bone (Fig.

2 B.) Other tunnel courses than those indicated may be considered, e. g., drilling in a vertical line through the anterior part of each condyle and through each tibial tuberosity to the front of the tibia, the return tunnel being a half inch to one side and



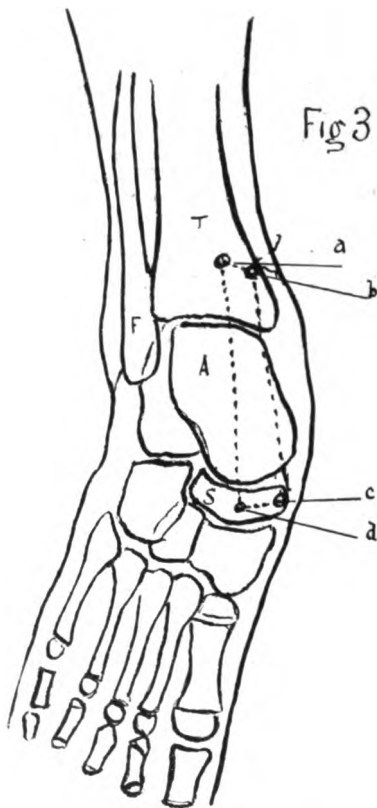
parallel (Fig. 1 FGHI.) (Fig. 2 D E F G). This admits of double anterior ligaments placed each side of the patella. This manner of giving accessory resistance to flexion has only recently been tried by the writers, but it appears to possess advantages that recommend it not only for accessory purposes, but also as a separate and independent mode of limiting knee movement.

The end of the silk is looped into the wire and drawn through the first portion of the tunnel, and so on, through each successive section back to the point of beginning. Drawn tightly as it is pulled through the knee joint it holds the leg in nearly full extension. Before the ends are tied, a small button of bone is removed from the condyle, making a depression in which to bury the knot to prevent pressure on overlying tissues.

The flap having been sutured and the dressings applied, the limb is secured in a plaster of Paris spica extending from the pelvis to the foot, a large fenestrum being made over the knee for inspection and dressing.

The technic of placing silk ligaments in the ankle joint and tarsus, for holding the foot in position, varies from the foregoing only in the anatomic difference of the parts and the type of malposition in the foot.

The tendo-Achilles when shortened is divided as the preliminary step. For the equino-valgus type of deformity, an incision is made through the skin only, extending downward and inward, from a point above the inner malleolus, to the tubercle of the scaphoid (Fig. 3.) The underlying tissues are pushed aside ex-



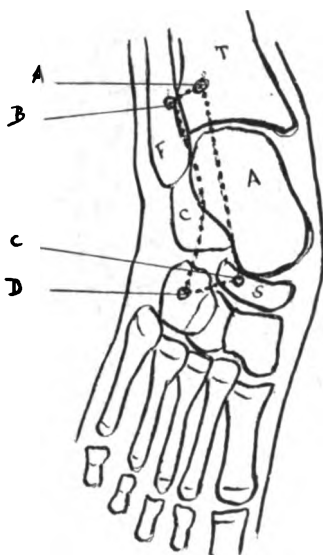
posing the tarsal and ankle ligaments and the subcutaneous surface of the tibia.

The drill (or the Kelly's needle previously mentioned) is entered on the surface of the tibia above the inner malleolus, passed downward and forward into the ankle joint, penetrating the trochlea of the astragalus, the neck and head of that bone, and thence through the scaphoid, emerging on its internal surface (Fig. 3 a.d.c.b.) The drill being withdrawn, is again entered at this point of emergence on the scaphoid, passed downward and backward through the lateral portion of that bone for a half or three-fourths of an inch. From the last point of emergence the drill is passed upward, backward and outward through

the scaphoid, astragalus and tibia, to emerge on the subcutaneous surface of the tibia, a little to one side of the point of first entrance.

A wire is drawn through each section as the drill is removed by means of which the silk ligament is drawn successively through the several tunnels (in the manner described for its introduction into the knee) and the ends tied under firm tension. The purse-string action of the ligament pulls the foot into over-correction, if the foot has previously been manipulated into a state of free mobility.

Fig 4

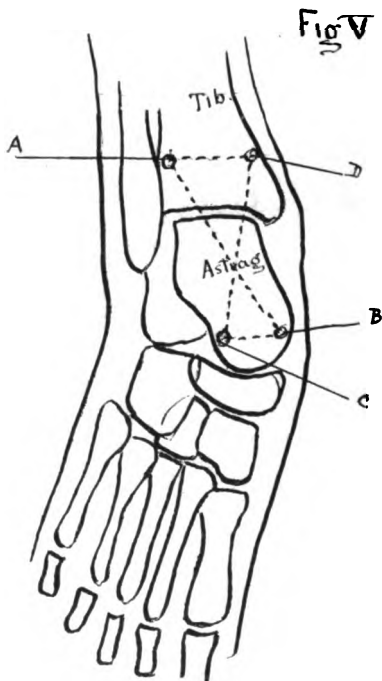


The use of a strong curved needle in place of the drill is a later modification of the detail in very young cases. Its course, when pushed through the semi-cartilaginous bones of the ankle and tarsus is essentially the same as that indicated for the drill, except that it is brought to the surface at several points, and re-inserted, while traversing the lines of direction which have been indicated for the drill. The needle being large enough to carry the silk no wires are required.

After closing the incision the foot is dressed, and secured in an over-corrected position in a well padded plaster of Paris splint, reaching above the knee, and widely fenestrated over the front of the ankle and foot, to avoid pressure and give access to the dressing.

The technic is only slightly varied to adopt it to the equinovarus type of deformity—the tunnels being then made in the outer side of the ankle and tarsus, and so arranged that the ligament when drawn tightly will exert a flexing and everting action on the foot. (Fig. 4 ABCD).

For the equinus type of malposition—or the “drop-foot”, with no associated lateral deviation, the silk ligaments may be passed through tunnels drilled through the tibial end, passing obliquely through the ankle joint and astragalus to the lateral aspect of the



and, except for moderate infiltration and tenderness on movement, head of that bone, on each side. These two oblique tunnels are connected at top and bottom by a transverse tunnel in the end of the tibia and head of the astragalus (Fig. 5 ABCD). Only small incisions ($\frac{3}{4}$ inch) are required in the skin and underlying parts over points where the drill enters, and emerges from, the bones. The silk ligaments cross in the anterior part of the astragalus, and when tightened hold the foot in nearly a rectangular position.

Prompt reaction occurs in both knee and ankle joints from the intrusion of the drill, and the presence of the silk ligaments. Effusion with tension and tenderness are quite marked for a week or more after the operation, but with no elevation of temperature. The reaction subsides during the three or four ensuing weeks,

the joints are in condition to bear weight with the aid of crutches about the eighth or tenth week after operation.

Fixation of the knee or foot, by this plan, is not complete at the termination of the operation. There occurs a drop of the leg of about 15 degrees before the holding tension of the knee ligaments can be felt. Slight extension and lateral movements in the foot can be made before there will be resistance from the ankle ligament. There is further increase in the amount of these movements when the splints are taken off, and permission given to walk.

Following the removal of the plaster casts in the ankle cases, the feet are protected by valgus or varus shoes, as the case requires, to diminish strain on the silk ligament when the patients are allowed to stand. Following removal of the knee splints, about the tenth week, the only protection the knee receives is from crutches.

The patient is encouraged to stand with the aid of crutches, and bear weight on the knee joint, and make such movements as he is willing to do in the attempt to walk. The purpose of this is to prolong the reactive process in the joint sufficiently to insure an abundant exudate for later organization and thickening of the capsular tissues.

The case presented in this connection fairly represents the conditions for which the procedures just described have been employed, these having been used for the knee and ankle in this instance. The patient who is eight years old, has residual paralysis involving the extensors and flexors of the right leg, causing a drop knee; he also has paralysis of the abductors and flexors of the left foot. The right foot had been a "flail" foot, for which an arthrodesis was performed two and one-half years ago, producing a rigid ankle. The initial attack of polio-myelitis occurred about six years ago.

When first seen by the writer, two and one-half years ago, he could with difficulty stand by holding on to fixed objects, and could walk only when supported by braces aided by crutches, and then only with great effort. At that time an arthrodesis was done at the ankle to secure a rigid foot on which to stand.

In February of the present year the right knee was operated in the manner herein described, and three weeks later an operation of a similar character was made for the relief of the left foot.

This patient was the first case for which this operation was done.

Four months after operation, the knee from free tenderness on weight bearing in the standing position. It was only when tension was placed on the silk ligaments by holding the leg unsupported in extension that there was complaint of pain.

Movement in the knee then permitted it to drop to about twenty degrees from the straight position. With this amount of motion the patient could maintain the straight position of the leg with the higher muscles, and his manner of placing weight on his knee joint.

Except for having a nearly rigid ankle on that side, locomotion was quite easy of performance with slight assistance. At the end of nine months the angle to which the leg dropped increased to about 80 degrees but with no less of the stability which had been secured. During that period there had been marked thickening of the capsular tissues of the knee and ankle from organization of inflammatory exudates.

The patient was placed on his feet, to walk with the aid of crutches, ten weeks after the first operation. The knee and the left foot have been protected by crutches and the valgus shoe during the intervening time, until two months ago, when the patient showed sufficient control to partially discard crutches.

The X-ray appearance of the knee and ankle shows only cloudiness due to exudates—no traces of the silk ligaments being visible.

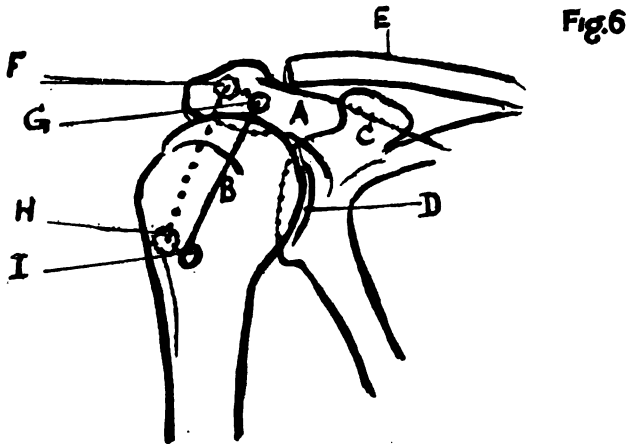
The ankle and feet after operation are less sensitive to body weight and movement than the knee. The feet remain well within the weight-axis of the limb; and but for the fact that many of these patients with paralytic equino-valgus develop knock knee it would not be difficult to guard the feet against relapse of malposture.

A further application of this idea was adapted to paralysis of the deltoid, in the case of a child five years old who had poliomyelitis three years prior to the time of operation. The object sought was to remove from the deltoid the dragging weight of the arm, which opposed all efforts at regeneration in that muscle and permit arm movements by means of the scapular muscles.

Accordingly the humerus was suspended to the acromion by silk ligaments placed in the tuberosity of the humerus, passing through the joint and through the acromion and tied on the superior surface of that process. The effect of this was to draw the end of the humerus close to the inferior surface of acromion, and obliterate the gap ordinarily seen and felt below the tip of acromion in such instances.

The operative detail (Fig. vi) in this procedure is simple, consisting of:—1st. An incision on the outer aspect of the shoulder from the top of the acromion to about the line of attachment of the deltoid in the humerus, exposing that muscle. 2nd. The drill is passed directly through the muscle fibres to the bone, at the base of the greater tuberosity. It is then pushed upward

through the tuberosity into the joint and thence upward through the acromion internal to the insertion of the deltoid; a wire is drawn through the bones as the drill is removed. 3rd. A second penetration of these bones is made with the drill about $\frac{3}{4}$ inch external to the first, and parallel to it, and a wire also inserted on withdrawing the drill (Fig. vi. FGHI.) 4th. A No. 14 paraffined silk ligament is then pulled upward through the first drill-tunnel. The upper end of the silk is then threaded into a Kelly's needle and passed under the deltoid, close to the periosteum, to the second drill puncture in the acromion. The same



procedure is also adopted to carry the lower end of the ligament under the deltoid at the base of the tuberosity, after which it is attached to the wire and drawn upward through the bones, both ends being tied on the acromion while the head of the humerus is pushed upward and the arm abducted. After suturing and dressing the incision the arm is secured in abduction by an axillary pad and shoulder bandage. The holding power of the ligaments was at once evident. Reaction in the joint was uneventful and practically painless.

While no very definite conclusions can as yet be drawn from the limited experience in the few cases that have been operated, and the short interval of time that has elapsed, it nevertheless appears probable that this procedure has a place of value among the numerous methods in use for the fixation of paralytic joints. It does not, like arthrodesis, involve mutilation of the joint, and does not, like the latter, cause ankylosis. It appears practicable also to employ it in complete paralysis of the leg and foot groups in children of ages unsuitable for arthrodesis. As it produces

only limitation of movement, the possibility of regeneration occurring in some of the impaired muscle groups would not be interfered with as in a joint which had been completely ankylosed. That there is little to apprehend from the introduction into large joints of an aseptic foreign substance like the silk ligament is abundantly attested by the case here shown, and by many others not presented at this time.

The paraffined silk tendon of Lange was given the preference in these operations in view of the use that had been made of it for somewhat analogous conditions. The uncovered silk was regarded as more liable to cut its way out from the bone fastenings under the tension to which it would be subjected. On the other hand, it was believed that that form of silk ligament would excite more reaction in the joint; observation of the cases operated suggests that effect as being a desirable quality in the material to be used, as tending to produce a more abundant exudate. But as yet no trial has been made of any material other than the paraffined silk.

The application of this method with some variation of the details described, and for other paralytic conditions than those mentioned is easily conceivable, especially when the preservation of some motion in a joint is an important consideration. Even the paralytic dislocation of the head of the femur would appear to be susceptible of some control by this plan.

While this procedure would occasionally be available in place of tendon transposition and tendon elongation, it appears probable that it may, to a large extent, become a substitute for arthrodesis. In the milder forms of paralytic deformity of the feet, it suffices for holding them in good functioning positions, without transposition of intact muscles, during a period when regeneration may be expected to occur. Its simplicity as compared with the problems of tendon transposition and tendon elongation, is one of the advantages which would often recommend it for preference.

It also offers an opportunity to repeat the operation in the same joint, if necessary, without detriment to the improvement which may have followed an earlier attempt to limit its movement. If, on the other hand, it were evident that this procedure restrained the joint detrimentally in its movements, or the recovery of function or development, it would be easy to remove the restraint exercised by the silk ligament by dividing it anywhere in its continuity, or even withdrawing it altogether.

No tendency has thus far been shown for the silk ligaments to cut their way out of the joint, or cause sloughing of the tissues in contact with them. They become looser, however, with

time and the use of the limb. As they cannot stretch, the chief source of looseness is probably from absorption of the bone in which they are buried at points where tension is greatest.

What the ultimate disposal of these artificial ligaments will be, by the tissues in which they are imbedded, and their effectiveness for the purpose intended may, in part be conjectured from our knowledge of their behavior when placed in other tissues, for different conditions from the present, as, e.g., the elongation of tendons, etc.

The more recent and somewhat radical use we have made of this agent suggests that its presence in the bones and joints under aseptic conditions is benign and harmless; that it may be utilized in the manner described to modify instability in joints designed to carry weight when the weight carrying force has been impaired or lost; and further, that it may have even a wide application for securing immobilization, temporary or permanent, in various bony structures when such a condition is desirable.

Further experience with this method, and observation of the time factor, following the use of parts so treated, are necessary to establish definitely the value of the facts that have here been only briefly and superficially presented.

481 DELAWARE AVENUE.

The Use of Silver Iodide in Urethritis and Cystitis

By JAMES A. GARDNER, M.D.
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SILVER iodide is a preparation for use as an injection for various inflammatory conditions of the urethra and bladder. It was first brought to my attention by an article by Dr. G. Paul Laroque, (1) who quotes from the report of Siter & Uhle. (2). The preparation as used at that time was a ten per cent. suspension of iodide of silver in mucilage of quince seed.

During 1907, I used the preparation in a number of cases but because of the difficulty of preparing it, I stopped using it. It was again brought to my attention by the experimental department of Parke, Davis & Co., which had devised an ingenious method of furnishing a silver iodide so that physicians may prepare their own dilutions extemporaneously at the time required and which preparations can be mixed in an aqueous solution. This preparation is a finely palpable powder which is in suspension rather than in solution. With it treatment is carried out with very little difficulty. It has all the known advantages of the ordinary silver salts with none of their annoy-

ing disadvantages. With the exception of argyrol all of the silver salts with which I am familiar and which are claimed to be non-irritating, cause more or less complaint by patients when they are used in sufficient strength to bring about results. With argyrol, as we all appreciate, the great disadvantage is the staining of one's hands and the patient's linen.

It is claimed that silver iodide does not coagulate albumen and it apparently is an efficient germicide and is non-irritating unless used in strength of 1-10 or stronger. The preparation which is furnished the physician is a concentrated syrupy solution and is first prepared by the admixture of potassium iodide and silver nitrate with a small amount of glycerine and water. This forms a clear solution and when the physician wishes to use the preparation he measures the necessary quantity of water and then by means of a dropper or pipette he adds to the water a very small quantity of the concentrated silver iodide solution. When this concentrated solution is diluted with water the silver iodide is precipitated in suspension for some time. The finely divided silver iodide in suspension is ready for application by merely shaking up the aqueous solution at the time of injection.

On review of over one hundred cases treated with this preparation: At first according to the instructions given me by the manufacturer I began using solutions about 1-4000 to 1-2000. This preparation was most bland and non-irritating. I then from time to time increased the strength and found that I obtained better and quicker results. I believe that the preparation relieves the inflammatory condition in two ways, first, mechanically by covering the mucus membrane with this powder which settles down after a short time; secondly, by its germicidal action. My routine method of treatment in acute cases is as follows: the discharge is carefully stained to make positive diagnosis for gonococci. At first, I use an ounce syringe with a solution 1-60. I have never seen any complication arise from placing this medication in the deep urethra at the outset of the disease; on the contrary I believe that if we are so fortunate as to be able to cover the mucus membrane before it is attacked by the bacilli, we have made a distinct gain. If the urethra is very much inflamed I precede the silver iodide with a two per cent. solution of cocaine to allay the sensitiveness. This treatment is repeated once a day for three or four days when, as a rule, the patient will make no complaint from the use of the silver iodide alone. At that time he is given a four ounce bottle with two c.c. of silver iodide equalling 1-60; also an ounce syringe with a soft rubber tip with instructions always first to urinate and then slowly to inject, holding the solution for

five minutes. This leaves about two-thirds of the solution in the posterior urethra and in the bladder.

That which he has left in the urethra remains there after three or four urinations and that in the bladder has a chance to well coat the posterior urethra thoroughly before the next urination so that we have found silver iodide in the urine forty-eight hours after the application. The patient at this time should be instructed to drink large quantities of water, it often helping him to follow out these instructions if lithium carbonate tablets are prescribed in large glass of water every two hours. If his urination becomes painful that old prescription of

Tr. Hyoscyami	oz. 2
Liq. Potassae	drachm. 2
Syrup. Cinnamomi	q. s. ad oz. 4

teaspoonful in water every two hours is substituted for the lithia tablet. The patient for a few days still reports once a day when he is given the injection of 1-60 to 1-30 and uses the solution of 1-60 two or three times during the twenty-four hours at home. The average acute case subsides in two or three weeks. When the discharge from the anterior urethra clears up and the prostate and seminal vesicles have been proved not to be infected, an instillation of 10 to 15 minims of a strength of from 1-20 to 1-10 in the Keyes-Ultzman syringe is used. It is understood that any complicating prostatitis, vesiculitis or folliculitis or other complication must be eradicated before the urethritis will clear up.

In using the instillation with preparations of about 1-20 to 1-10 the patient will often complain as they would in using nitrate of silver $\frac{1}{2}$ per cent. strength but after two or three minutes the pain as suddenly subsides as it began, a marked contrast to the use of nitrate of silver. When microscopic examination of the shreds in the urine and the prostatic secretion fails to show Neiser bacilli and there remains only the catarrhal remnants, astringents such as nitrate of silver 1-7500, zinc sulphate or lead acetate may be used as an irrigation. Silver nitrate is probably the most effective drug we have for this purpose.

After finding this product very effective in gonorrhoeal urethritis I also found that it was effective in allaying inflammatory conditions of the non-specific urethritis. I think in these latter cases that it was more from the mechanic effect of covering the mucus membrane than from any germicidal action. In briefly outlining the treatment by the use of silver iodide I have not mentioned the use of balsams or various other internal remedies nor have I mentioned the complications which often arise,

strictures, peri-urethral abscesses, chronic folliculitis, chronic prostatitis and vesiculitis, but these conditions of course need to be treated apart from a surface application with drugs. In the treatment of urethritis I think we are all agreed that the more soothing and bland the preparation can be and still be effective, the more we gain. I believe this new preparation which is remarkable clean, is effective first, mechanically, by covering the irritable mucus membrane, and, second, by its germicidal action and last but not least, is most bland and non-irritating.

403 FRANKLIN STREET.

1. *Therapeutic Gaz.*, Nov. 15, 1906.

2. *University of Penna. Medical Bulletin*, May, 1905.

Letters to Physicians

Denutrition, "Migraine," Esophoria, Fading-Image and Other Diseases Caused by Eye Strain

By GEORGE M. GOULD, M.D.
Atlantic City, N. J.

ABOUT two years ago Mrs. G., up to the time of consulting me, had had sickheadaches with vomiting and nausea so long that she could not remember when they began. There had also been great dizziness with frequent weakness, as if she were about to fall. There were often "rushes of blood to the head," much indigestion, day-time drowsiness, "hurting of the head," feeling of dulness and stupidity, pain in the back of the neck, and although "tired all the time" she was constantly "nervous, tense and unable to sit still." Of course she had constant tilting of the head to one side. I found also that she had 20° of esophoria, with typic "fading image," the right in about three seconds, the left in about six seconds. And the retinas were so scarlet and stippled as to arouse great fear. There was venous pulse upon both discs. The woman was very much emaciated. A permanent cycloplegia for three weeks was at once ordered. One of her several former physicians had told her when she spoke of eyes, that her sick headaches were "due to other causes." She had taken quantities of medicines of many kinds, and her last oculist had ordered B.E.+Cyl.0.25 ax. 90°, a correction of her ametropia as accurate and effective as would have been that of any medieval charm. Her sick headaches, pains and mental and nervous troubles disappeared immediately with the first atropin drops that were instilled. Her static refraction was found to be:

R.+S.1.50 +C.O.25 ax.90°=20|30)

L.+S.1.37 +C.O.37 ax.90°=20|30(

When the effect of the drops passed out of her eyes there was a great feeling of discomfort experienced but the old-time symptoms did not recur. "Has not felt so well in five years." When she first came she could hardly walk from the street car to the house; even four months afterward the "fading image" still persisted, and there was inability to read without signs of ill-health. In the four months she had gained 20 lbs. in weight. Fifteen months later she lost 10 of her 20 lbs. gained, dull headaches began to come back, with some "stomach trouble," etc. A change in the refraction-error was found which accounted for the relapsing tendency.

This case, illustrative, in most respects, of an enormously large number, suggests certain queries:

1. In an unknown but high proportion of all cases in which systemic reflexes and effects of eyestrain exist, there is proof beyond question that eyestrain causes denutrition, often reducing the sufferers to under-weight, and even to positive emaciation. Why is this proof, and the fact it proves, so utterly neglected?

2. "Migraine," or sick headache in my experience is absolutely always the result of ametropia, uncorrected or malcorrected. Why are the millions of sufferers from this hideous disease allowed to continue in their suffering, when every case may be prevented and cured?

3. The most frequent and disastrous of the local inflammations of the eyes, such as retinitis, choroiditis, glaucoma, and cataract, rarely ever—one might say, never—arise in eyes which have had their ametropias adequately corrected. Why is this truth, revolutionizing ophthalmology, almost universally denied, or ignored?

4. Heterophorias are the results of ametropia. Why do so many of the oculists of the world believe and treat them as causes of eyestrain, and by decentering lenses, or by tenotomizing, or by not preventing the ametropic effects, through correction of the ametropia, keep up the farce of a specialty almost every one of the members of which disagrees with the others in such a highly important phase of practice?

5. Why is a most incapacitating and significant symptom, "Fading Image" and the disease I have named, "Ophthalmovascular Choke" universally ignored in ophthalmologic practice and reports?

The answer to these questions is obvious: Because the differential diagnosis by means of cycloplegia is never tried; and because there is no agreed-upon science of the practical diagnosis of errors of refraction. One hundred oculists would

diagnose and treat a single patient in one hundred mutually exclusive and contradictory ways. Not a hint exists that this miserable scorn-provoking condition should be ended by the establishment of a scientific School of Refraction which would finally extinguish this egregious professional disgrace.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

1863.

During my visit home my wife and I went to Michigan to visit my mother at Okemos. While there I was invited to a supper given by Zachariah Chandler to the Legislature and other guests, to the number of five hundred, at the Benton House in Lansing, upon the occasion of his re-election to the U. S. Senate. At the termination of my leave, or the time I had allotted to be absent, viz., January 19, 1863, I started back for the Army. I lost my baggage on my homeward trip somewhere between Albany and New York, so I returned by the same route spending a day in Albany in the search for it. I finally found it at the Chambers Street depot in New York, which was then the terminus of the New York Central R. R., and arrived in Washington on the morning of the 21st. I reported immediately to the Surgeon General, who found no fault because I had been away. He ordered me to report to Captain DeRussy at the War Department for muster, and this officer requested me to call the next morning when the papers would be ready. I did as requested, and on Thursday, January 22, was mustered out as Assistant Surgeon to date January 21, and mustered in as Surgeon to date January 22, 1863. My next step was to visit the Paymaster-General's office for payment as Assistant Surgeon, for November and December and to January 21, 1863. I was there informed that my case could not be reached in turn until Monday, the 26th, which would compel me to remain in Washington till Tuesday.

I met A. C. Winter, of Lansing, Michigan, Paymaster U. S. Navy, at the National Hotel Sunday evening, the 25th, in company with Mr. Leach, late Member of Congress from the Lans-

ing district, and whom I had met a few days before at Chandler's big supper. During my stay in Washington I met Dr. Hall, who had been ordered up from the Army (No leaves were granted at this time) to see his son Theodore, who was sick in the hospital as he supposed. He found, however, on his arrival that the poor boy had died, and now the problem was to get permission to take the body home. Theodore had enlisted in the 154th N. Y. Volunteers without his father's knowledge or consent, and, of course, the family were very much heart broken. No leaves of absence were granted to officers at this period, which was just at the termination of Burnside's career when everything was in a state of confusion, and no one could predict what would take place next. I proposed to Dr. Hall that we interview Senator James R. Doolittle of Wisconsin, whom I had known before the war when we lived in Wyoming County, and see what he could do in the premises. We met the Senator in the hall of the National Hotel, and followed him to his room where I introduced the doctor, and stated our errand as briefly as possible. Without a word in reply, the Senator sat down and wrote a letter to the Secretary of War, stating the case in detail and closing with these words: "Now, my dear Secretary, even the sternest rules of war must permit a father to bury his dead son." I remember them as well as though it were yesterday. Armed with this letter we proceeded to the War Department, where it immediately brought us an audience with the Secretary, who, without hesitation, ordered a ten days' leave of absence for the doctor, and also pay for November and December. Dr. Hall was so relieved that he thanked me over and again, the tears rolling down his cheeks in great drops as he bade me good-bye.

I left Washington Wednesday morning, January 28, for the Army of the Potomac, reaching Belle Plain Landing at five o'clock P. M. in the midst of a most disagreeable snow-storm. It was impossible for me to proceed that night to the camp of the 49th, whither I was bound, so I found quarters for the night at the Landing through the courtesy of an officer of the Q. M. Department. The next day, the 29th, I sent up for my horse, but by the time I reached camp it was nearly dark. My baggage was not brought up until near dark of the 30th, which occasioned another day's delay. It will be impossible for me to undertake a description of the roads at this time, but it is sufficient to state that the Army of the Potomac is literally, completely and totally stuck in the mud. It requires a whole day for teams to go to Belle Plain and return to White Oak Church with eight bags of grain, a distance of four miles and back, and yesterday they did not bring up any grain excepting on horseback.

A change of commanders has again taken place. Hooker relieves Burnside in command of the Army, Franklin goes away altogether, and Smith is also given another command. Colonel Bidwell is very kind to me, and Major Ellis is as gay and happy as ever. I enjoyed the two days spent with the 49th at this time very much indeed, and begin to dread the separation which must now be final.

I started for the 57th regiment Saturday morning, January 31, and reached there about noon, calling at Division Headquarters on the way where I saw Major John Hancock, A. A. General, and others of the staff whom I had known in the Sixth Corps before General Hancock was assigned to the Second. General Hancock was away on leave, and Colonel S. K. Zook, of the 57th, was in command of the Division. I learned from him the location of the camp of the 57th, and about noon I reported to Lieutenant Colonel Chapman for duty, he being in command of the regiment. The officers are a very fine body of young men, and all received me very cordially, though are frank to express their disappointment in the failure of Dr. H. C. Dean, the Assistant Surgeon, to receive the promotion. Dr. Dean is very kind to me, and altogether I cannot be otherwise than pleased with my reception. The regiment is small, having only about 170 men present for duty, and today, February 2, they are for the most part busily engaged in constructing log huts, so that in a few days they will be very comfortably situated. There are very few on the sick list as the camp is pleasantly located on a sandy knoll, so we are not troubled with the mud as much as many other portions of the Army are.

February 5. The entire field and staff occupy a hospital tent as sitting room and mess-room, behind which and communicating with it is a wall tent, that I occupy as my sleeping apartment. I like the officers very much indeed, and hope my first impressions will continue. Lieutenant Colonel Chapman is a young looking man with smooth face and dark hair and eyes, about 27 years old, and a splendid disciplinarian. It is snowing today quite hard, and such a storm in the North would soon make sleighing; but here it only means more mud.

February 8. This is my second Sunday with the 57th. Last Sunday Dr. Dean took me over to Corps headquarters, and introduced me to the Medical Director, Dr. Taylor, who is a brother of Bayard Taylor. Dr. Nelson Neeley, our 2d Assistant Surgeon, is a character—tall, phlegmatic, slow, but bright and dry with his wit. Yesterday we moved our camp about four hundred yards, and are very pleasantly situated. I have a nice old-fashioned fireplace in my quarters, that is now giving forth

large dividends of both light and heat. I have a hospital tent for my front room, and a wall tent for my sleeping apartment, which is no longer used in common with the other officers as a mess-room. My large apartment is, however, a convenient rendezvous for the officers at evening, and they congregate there for social and friendly intercourse. Indeed, it is quite like a club room in the evening. Lieutenant Colonel Hammill, Dr. Wood, Dr. Vander Veer, Captain Derickson, and other officers of the 66th, as well as some from other regiments, frequently join us in our evening's entertainments, and we make up quite a merry party.

February 12. The times are very dull in camp these days, as the roads are so bad that riding is not agreeable, so we are committed to the dull routine of eating, reading, and sleeping in the daytime; but in the evening we have quite jolly times. Some of the officers are very good singers, among whom may be mentioned Captain Wright, Lieutenant Middleton, and Colonel Hammill of the 66th, who is always willing to lend his voice to aid in the entertainment of our visitors. Captain Rasdurichen, a Russian officer on General Hooker's staff, is a frequent visitor, and he occasionally passes the night with me, as I have an extra bed for guests.

February 15. I have been suffering with the toothache for a day or two. Today, however, the pain is gone, but my face is very much swollen; it is a reminder of the time I had at Harrison's Landing last summer. The officers are very kind to me, and treat me as though I was an acquaintance of many years, instead of a comparative stranger. Many officers are now obtaining leaves of absence for ten days, under an order permitting a certain number from each regiment to be away at a time. This is Monday, and on Friday last I visited the 49th, where I spent a part of the day very pleasantly. Colonel Bidwell had gone home for ten days, and Dr. Hall had not returned from the sad mission which called him home. When General Smith was ordered away from the Sixth Corps, the officers of his old Division, the 2d, paid him a visit in mass to bid him good-bye and God speed. He is very much liked by them all, and a movement is on foot to present him with a set of silver plate to cost \$1,000.00. On Saturday last I visited Stafford C. H., where I saw the 136th, and 154th regiments. I there met Gad Parker, Daniel Post, and Levi Vincent; also Colonel Wood, who commands the 136th. At the 154th I called upon Dr. Van Aernam and Dr. Dwight W. Day. The weather has been more favorable for riding for two or three days past, and I have been improving the opportunity.

February 19. We have just passed through one of the most severe storms that I have experienced in Virginia. It snowed Monday night and all day Tuesday, and by Tuesday night we had over a foot of snow. It then set in and rained, the rain continuing all night Tuesday and through the day Wednesday and Wednesday night, ceasing about ten o'clock this (Thursday) morning, and now the mud is ankle deep or over. Dr. Hall came to see me Monday, the 16, and is feeling very much depressed from the loss of his son.

February 22. This being Washington's Birthday, salutes are being fired at several points within the lines—at General Hooker's Headquarters, Stafford C. H., Acquia Creek, and Belle Plain. It snowed all night last night and a good part of today, with high wind this P. M., and the snow is now drifting badly. It was so cold this morning that I did not get up until noon, as I could not get my fire started, and I found about six inches of snow in my tent when I awoke.

February 27. The roads are very bad and it is very dull in camp as a consequence. We cannot pay visits nor receive them, until we get some drying weather. Under the order granting leaves to a certain number of officers at a time, I may be able to go home next month for ten days. We shall see.

March 1. I visited the 49th yesterday and saw, among others, Colonel Alberger who was paying a visit to the old regiment. He is in the Veteran Reserve Corps now on account of his wound, which renders him unfit for field service. We were put through our regular bi-monthly inspection and muster for pay yesterday, which fell on Sunday this time.

March 3. Today was appointed for a review by General Hooker, but it was postponed on account of the weather. I saw, and had a pleasant visit with Colonel Bidwell at the 49th the other day. He appears to be in much better health, and has resumed his usual urbanity of manner.

March 5. General Hooker reviewed the 2d Corps today. The troops looked well, though their ranks are thin. After the review we entertained a number of visiting officers in our (my) quarters.

• March 10. The weather is disagreeable again, and a damp snow is falling. My horse is looking finely, as I have a good groom in the person of Patrick Corbleigh, one of the 57th soldiers and an old stable man from New York City.

March 13. Captain Rasdurichen, of General Hooker's staff, has been staying with me for two days. He is an agreeable companion and a friend of several officers of the regiment. Yesterday, the 12th, (Thursday), a wedding took place in the Third

Corps, which attracted great attention from the novelty of the affair. Captain de Hart, of the 7th New Jersey Volunteers, was married to Miss Lamond, of Washington, and it was made an occasion of great festivity in his regiment. A large platform was erected covered in on three sides with evergreen trees and boughs, upon which the ceremony took place, in the presence of General Hooker and staff, two other Major Generals, ten Brigadiers, and a large concourse of officers, soldiers, ladies, and civilians. Mollie Lewis, of Washington, whom I met several times at Mrs. Ridgeley's, was one of the bridesmaids. The band played "Hail to the Chief" on the arrival of General Hooker, and, amidst displays of bunting, salvos of artillery, and bursts of music, the two were made one. Leave of absence for twenty days was granted the groom, and the party goes to Washington by special boat after the festivities are over.

March 16. Tomorrow will be St. Patrick's Day, and great preparations are being made, for its celebration by the Irish Brigade which belongs to this Division, and whose camp adjoins ours. General Meagher is first and foremost in the affair, and we are expecting many visitors from other portions of the Army at our camp during the day.

March 18. Yesterday the celebration came off as expected and, it being a beautiful day, everything conspired to make it as jolly as possible. Horse races, the soaped pole, greased pig, and sack-racing were among the features of the day; and after these were concluded all were invited to General Meagher's headquarters to luncheon and arrack. The bridal party of last week was in attendance, and I had the honor of an introduction to the bride by Mollie Lewis. Today the party goes to Washington, and thence North. Major Ellis and Lieutenant-Colonel Theodore Hamilton, of the Sixth Corps, and other officers of that Corps, besides many who were friends of the 57th officers, were entertained in my quarters after the races, and the fun was kept up until a late hour of the evening.

March 20. It is cold and snowy today, and it is difficult to keep a comfortable fire on account of the changeable nature of the wind. There has been a cavalry fight somewhere on our right, as we heard distant firing at intervals during yesterday.

March 23. It is a year today since we sailed from Alexandria for the Peninsula. What changes have been wrought in that time! Who can tell what another year will bring forth? To-day it is warm, with threatening rain, and the snow is all gone. Dr. H. B. Miller, of Alexander, New York, paid me a visit yesterday, which I enjoyed very much. He is spending a few days in the Army, and is quartering with the 136th New York,

at Stafford C. H. On the 13th inst. I made application for leave of absence, but it was returned on the 14th disapproved. Today, as it was intimated that it would go through, I renewed it.

March 26. My application for leave came back today approved, authorizing me to be absent for ten days from the 27th, so I started on Friday morning, March 27, and reached Lancaster on Saturday night, the 28th, persuading the conductor to let me off, though the train did not make a regular stop there. At the expiration of my leave, not being able to return, I forwarded a Surgeon's certificate of disability to cover twenty days more; and, on the 20th of April, I started back, reaching Washington on the morning of the 21st. I went immediately to the Pay Department to obtain my pay to March 1, but Major Potter, who pays our Brigade, had gone down to the front for that purpose. On reaching the camp, April 22, I found I could not draw pay until a military commission had settled the question as to the cause of my absence, whether it was a good and sufficient one or not. This is in accordance with recent orders from the War Department in reference to officers absent on Surgeon's certificate of disability. When I reached Brook's Station, the nearest one to our camp, on my return I walked over, a distance of two miles and, as it was a very hot day, I was very much overcome on reaching my quarters. The regiment was in the same location, and nothing of importance had transpired during my absence, so I had lost nothing by my month's visit home. Now, however, everything looked like an immediate move, orders of a preparatory nature being constantly received. This is Wednesday, April 22, and I should not be surprised if we had a battle before the week ends. This is the impression that I reach from conversation with Colonel Chapman and other officers, whose judgment is reliable.

April 24. We are still in a state of disquiet, orders upon orders being received, but the final one to start has not been issued yet. While I was home we heard of the death of Captain McLean, Fifth U. S. Cavalry, which occurred suddenly in Washington, and rumor had it that he died in a debauch. This seems to have been the report made by Surgeon Basil Norris, U. S. Army, who was called, but did not see the Captain during life. This report prevented his widow from obtaining pension, and after the war I obtained a correction of the record upon representing to Dr. Norris the soldierly qualities of McLean, and his sabre wounds in the head, received during Stuart's raid around the Army of the Potomac, June 13, 1862. I procured a letter from General Custer substantiating my statements.

whereupon Dr. Norris revoked his former report, and the pension was duly granted. This was during 1866 and 1867.

To return from this digression: I found the regiment in good health on my return and all were glad to see me back, finding no fault because I had prolonged my stay. Sunday, April 26, still on the *qui vive*, expecting to move at any moment; the weather is warm, and everything is in readiness for the start.

(To be continued.)

Penetrating Wound of the Orbit with Dislodgement of the Vomer

LAST July, while picking fruit, a lad eight years old fell thirty feet. Without injuring the lids, a branch pierced the internal orbital wall, traversed the pharynx and impinged upon the opposite wall of that cavity. In its passage through the pharynx it dislodged a large portion of the vomer which was expectorated a couple of days later.

The lad's misfortune lies in the fact that the cornea suffered an abrasion which became infected from the pus that soon bathed the eye, and resulted in a perforating ulcer with a subsequent staphyloma. As is not unusual the intra-ocular tension was raised which necessitated an iridectomy. Up to the present there is useful vision.

The feature of the case which must be rare if not unique is the dislodgement of the vomer.

The haemorrhage following the accident was severe and Dr. Pearson, to whom I am indebted for the case, had considerable difficulty in controlling it.

510 FRANKLIN ST.

TOPICS OF PUBLIC INTEREST

DR. W. W. KEEN of Philadelphia, has sent out a letter with copy of a petition signed by many medical men all over the country, including many with military experience, endorsing House Bill No. 30 for the reestablishment of the canteen. Members of the profession are requested to write to their senators and representatives (U. S., not state) and to Honorable John Hay, chairman of the House Committee on Military Affairs. This matter has been so thoroughly threshed out in the medical press that we do not need to repeat the arguments as to genuine temperance, diminution of venereal disease, increase of military efficiency and the saving of crime, due to the Canteen.

THE annual meeting of the Medical Society of the County of Chautauqua was held in Dunkirk, December 13, 1911. The following officers were elected: President, Dr. A. H. Eastman of Jamestown, Vice presidents, Drs. N. G. Richmond of Fredonia and George F. Smith of Falconer; Secretary-Treasurer, Dr. J. W. Morris of Jamestown.

EARLY in December, a resident of Gainesville, attending a funeral in Perry, developed suspicious symptoms and, on examination by local physicians and by Dr. Edward Clark of Buffalo, was decided to have small pox. He is now quarantined at his home in Gainesville.

LACKAWANNA is considering the establishment of a municipal telephone service. This is a wise form of public enterprise, which is the rule in Europe and whose general adoption in this country would result in a material reduction of prices and improvement of service, especially in the way of inter-urban connection. Conditions are much better than when we had to pay 14 cents a message on annual contract but the prices are still approximately 100 per cent. higher than in Europe.

THE Reverend Mr. Richeson of Boston, who is awaiting trial in connection with the death of his former fiancée by potassium cyanid, cudahied himself Dec. 19, probably taking for his text Matthew 5, 27-30. Self-mutilation of this kind is sufficiently common to constitute a type and is by no means characterized by coincident insanity, unless in an inclusive sense.

THE Tonawanda water works reports a pumpage of 136 million gallons for November, 1911, at a cost of 120 tons of coal. The water consumption was at the rate of 541 gallons per capita. As 100 gallons is considered a fairly adequate supply by many cities, it may be worth while to explain that Tonawanda has a large commercial demand for water.

DURING November, the Buffalo water works pumped 3,710 million gallons of water at a cost of 2,787 tons of coal. This represents about 1 1-3 million gallons per ton, as compared with 1 1-7 for Tonawanda. The per capita consumption was about 287 per capita, per diem. This is very high. It is worth noting that, the larger the city, the less the necessary per capita consumption of water, for several reasons: Opportunity for more careful inspection against waste; Relatively less area for street sprinkling, &c; Relatively less use for fire, on account of greater proportion

of fire proof buildings; Relatively less use for commercial purposes, high land values driving large plants to smaller towns. LE ROY will have medical inspection of its schools. Good. The children of small towns are just as valuable as those of large cities. Let other towns and villages follow Le Roy's example.

MOUNT MORRIS has lately voted down a proposition to obtain water from Silver Lake—and on a light vote at that.

THE Elmira Academy of Medicine held its annual meeting Dec. 6, 1911. Officers were elected as follows: President, Dr. Herbert W. Fudge; Vice-President, Dr. John C. O'Brien; Secretary, Dr. Charles Haase; Treasurer, Dr. C. G. R. Jennings; Censors, Drs. A. J. Westlake, Elliot T. Bush and J. A. Bennett; Trustees, Drs. Sherman Voorhees and Ross G. Loop.

THE American Jewish Committee (356 Second Ave., N. Y.) asks our cooperation in an agitation to secure a fulfillment of treaty rights and an abolition of a form of persecution of their race. As many of us know, an ordinary European trip requires no passport. In fact, save for a few details, there is quite as much personal liberty in western Europe as in the United States, and vastly more so in regard to the right to purchase where one pleases and to hold his personal effects without official rummaging; vastly more so, too, in regard to personal violation of many moral and social obligations. Only in Bulgaria, Roumania, Turkey and Russia, is a passport necessary and only in one country in the world is the passport issued by the U. S. subject to local visé—in Russia. If the bearer of the passport states that he is a Jew or an atheist or if he refuses to answer as to his religion, he is denied entry. The Committee also claims, on investigation, to have found that the promises and representations of Russia, in reply to interrogation by the U. S. Government regarding the matter, have not been in good faith.

Whatever influence the BUFFALO MEDICAL JOURNAL may have is strongly in favor of the broadest religious liberty and the fullest performance of treaty obligations. In one particular, however, we feel that the ultimate welfare both of our country and of citizens of other countries, requires a sacrifice of a few private interests in the immediate future. No country should take a citizen or resident dependent of another country without the full consent of the latter and the discharge of all obligations to the parent country. It is the duty of this and other enlightened countries, not simply to afford an asylum for those lucky enough to escape from persecution but to compel, by their influence or by force, the essentials of religious and personal liberty under any government.

Mortality Statistics in Cities of 100,000 Population and over in 1910.

Advance Bulletin by the Census Bureau.

Registration State.	Number of Deaths ¹ from all causes per 1,000 Population.	
	1909	1910
Total ²	14.2	14.7
California	13.4	13.5
Colorado	14.2	13.8
Connecticut	15.0	15.6
Indiana	12.9	13.5
Maine	15.6	17.1
Maryland	15.5	16.0
Massachusetts	15.4	16.1
Michigan	13.1	14.1
Minnesota	(³)	10.9
Montana	(³)	10.6
New Hampshire.....	16.9	17.3
New Jersey.....	14.7	15.5
New York	15.7	16.1
North Carolina ⁴	(³)	18.7
Ohio	12.9	13.7
Pennsylvania	14.7	15.6
Rhode Island	15.6	17.1
Utah	(³)	10.8
Vermont	15.7	16.0
Washington	9.8	10.0
Wisconsin	11.8	12.0

¹ Exclusive of stillbirths.

² Includes District of Columbia.

³ Nonregistration state.

⁴ Includes only municipalities having a population of 1,000 or over in 1900.

Birth Registration States.	Births, 1910. ¹	Deaths of infants under 1 year, 1910. ²	Deaths of infants per 1,000 living births.		
			1910 ³	1909	1908
Connecticut	27,291	3,476	127	127	122
Maine	15,578	2,108	135	118	125
Massachusetts	86,765	11,377	131	125	130
Michigan	63,566	7,912	124	117	119
New Hampshire....	9,385	1,373	146	154	146
Pennsylvania	202,631	28,377	140	131	138
Rhode Island ⁴	6,595	1,111	168	142	132
Vermont	7,343	791	108	114	110

- 1 Provisional and exclusive of stillbirths.
 2 Exclusive of stillbirths.
 3 Based on provisional figures for births.
 4 Exclusive of Pawtucket and Providence, R. I., for 1910, for which the returns were not received from the state board of health in time for inclusion.

Registration City.	Death rates from all causes ¹ per 1,000 Popu- lation.	
	1909	1910
Birmingham, Ala.....	18.2	19.5
Los Angeles, Cal.....	13.7	14.0
Oakland, Cal.....	14.2	12.7
San Francisco, Cal.....	15.0	15.1
Denver, Col.....	17.0	16.4
Bridgeport, Conn.....	14.4	15.2
New Haven, Conn.....	16.9	16.5
Washington, D. C.....	19.0	19.6
Atlanta, Ga.....	17.2	18.9
Chicago, Ill.....	14.6	15.1
Indianapolis, Ind.....	14.3	16.3
Louisville, Ky.....	15.5	16.7
New Orleans, La.....	20.2	21.3
Baltimore, Md.....	18.7	19.2
Boston, Mass.....	16.8	17.2
Cambridge, Mass.....	14.7	15.0
Fall River, Mass.....	19.1	18.4
Lowell, Mass.....	18.0	19.7
Worcester, Mass.....	15.5	16.9
Detroit, Mich.....	14.0	15.9
Grand Rapids, Mich.....	11.9	14.6
Minneapolis, Minn.....	10.7	12.3
St. Paul, Minn.....	11.4	11.9
Kansas City, Mo.....	14.4	15.9
St. Louis, Mo.....	15.8	15.8
Omaha, Neb.....	14.7	15.1
Jersey City, N. J.....	16.8	16.3
Newark, N. J.....	16.5	16.5
Paterson, N. J.....	15.3	14.7
Albany, N. Y.....	17.6	19.4
Buffalo, N. Y.....	15.2	16.3

New York, N. Y.....	16.0	16.0
Bronx Borough	15.9	15.9
Brooklyn Borough	15.4	15.6
Manhattan Borough	16.6	16.5
Queens Borough	14.2	13.8
Richmond Borough	18.1	17.0
Rochester, N. Y.....	14.4	14.6
Syracuse, N. Y.....	14.5	15.4
Cincinnati, Ohio	16.5	17.4
Cleveland, Ohio	12.9	14.3
Columbus, Ohio	14.0	15.4
Dayton, Ohio	15.4	14.8
Toledo, Ohio.....	14.6	14.6
Portland, Oreg.....	9.8	11.0
Philadelphia, Pa.....	16.4	17.4
Pittsburgh, Pa.....	15.8	17.9
Scranton, Pa.....	16.3	16.4
Providence, R. I.....	16.1	17.7
Memphis, Tenn.....	20.1	21.4
Nashville, Tenn.....	18.1	18.7
Richmond, Va.....	20.7	22.6
Seattle, Wash.....	10.0	10.1
Spokane, Wash.....	12.6	13.0
Milwaukee, Wis.....	13.7	13.8

¹ Exclusive of stillbirths.

OUR CONTEMPORARIES

DR. WILLIAM J. ROBINSON announces the establishment of a new journal, the *Medical Review of Reviews*, to appear in January, incorporating *Therapeutic Medicine*. Eugenics, Sociology, History, Psychology, Current Biography, Poetry and Fiction touching upon medical practice, Cartoons, and an Index Medicus, will be prominent and more or less novel features. An excellent corps of editors is announced and, under Dr. Robinson's experienced and bold guidance, we look forward to something of unusual interest.

Our Dumb Animals for November 1911, is a good example of what the organ of humane societies ought to be. There is not too much sentiment, quite a good deal of matter intended

simply to awaken an interest in the lower animals, and a practical getting after real cruelty, without a word in opposition to the scientific use of animals.

THE *Maryland Medical Journal*, October and November, 1911, contain the first two parts of a serial by Lewellys F. Barker, on Some Tendencies of Medical Education in the U. S. It is difficult to abstract so lengthy a consideration of the subject but we commend the serial to those engaged in medical teaching or otherwise especially interested.

"JANE," in the *Buffalo Express*, remarks that "A child specialist often fools the mother but he can't fool the baby." It may be said, even more broadly that a physician in any line of practice may fool the patient's friends and family, sometimes the patient, himself and other physicians, but he can't fool the disease. And it is the very general and humble recognition of this fact, dear lady, that makes the regular profession insist on certain regulations, particularly as to the training and character of its own members and of those that would compete with it, that seem arbitrary and ungenerous, officious and even cruel. This is why we persecute sweet ladies and kindly gentlemen who want to get people well in nice easy ways, without having knowledge, gained in disagreeable ways, of what their bodies are made of and how they act and of what disease consists. This is why we approve of vaccination, not because we sometimes get a dollar, more often fifty cents and, about ten times as often nothing at all, for performing the operation. This is why medical societies oppose certain laws and urge the passage of others, against the wishes of the people.

THE *Transvaal Medical Journal* is agitating proper qualification of midwives.

THE *Sei-i-kwai Medical Journal*, edited and published by the Sei-i-kwai. (Society for the Advancement of Medical Science) is one of our interesting exchanges which we will gladly put at the disposal of anyone who can read it. The first article is on the Origin of Syphilis, by Dr. J. Redondo, originally published Spanish in another exchange, *La Prensa Medica* of Habana and done in English (to use a distinctly English expression which is quite appropriate in the present instance) by Mariano K. Kison of Tokyo. Redondo cites from the Bible and various other ancient books, including a Chinese reference dating back to 2637 B. C., descriptions plainly referring to venereal diseases and probably to syphilis.

Bulletin of the Buffalo General Hospital

VOL. I

JANUARY, 1912

No. 3

Anaesthesia by Intra-Tracheal Insufflation

The New Apparatus at the Surgical Clinic of the General Hospital

THE question of anesthetics and of anesthesia is by no means yet an absolutely settled one, but the conviction is constantly gaining ground that as between the two, the man is more important than the anesthetic which he may administer; in other words, given by a reliable man, any of the anaesthetics in common use may be safely administered,—without the proper man not one of them. Next to the man, however, comes not merely the selection of the drug itself, but of the method of its administration. There certainly is a large choice as between methods. Beyond the mere question of method there stand also the mechanics and the mechanism of respiration. These topics are of surpassing interest when it becomes a question of opening the chest with the greatest degree of safety. To Dr. Meltzer, of New York, belongs the greatest share of credit for practically demonstrating that in man all that is required for satisfactory respiration is that a constant current of air shall be delivered at or near the division of the wind-pipe under an exceedingly gentle pressure; and that if this air be medicated with a certain percentage of ether vapor, anesthesia is rapidly produced and safely continued. If air be delivered, i.e., pumped in, under these conditions, there is no need for respiratory movement on the part of the patient; everything is done for him. Oxygen is delivered at the gateway of his capillaries just as pre-digested food can be delivered within the stomach, virtually all ready for use. Under these circumstances both life and anesthesia may be safely maintained by a simple, mechanical contrivance, for as many hours as may be desired.

Such an apparatus has just been placed in operation in the surgical clinic at the General Hospital. It consists of a little pump run by a motor which passes the air through a receptacle containing ether, this being provided with such an arrangement that exactly the desired strength of medication with ether-vapor can be automatically maintained; this is connected with a small tube which is passed down the trachea, and halted at about one inch above its bifurcation. The motor once in operation, air is delivered under a few millimeters pressure, which is just suffi-

cient to carry it to the remotest air cells, and there effect the oxygen interchange. The return current passes upward and backward along the trachea, which has been only partially occluded by the tube. It is a wonderful sight to see the purpose of respiration accomplished so satisfactorily without requiring any movement on the part of the patient's chest-wall, his breathing being thus done for him. By this new expedient the former questions, which so terribly complicated thoracic surgery, of negative and positive pressure, have been entirely superseded. When necessary, one or both lungs, and even the heart itself, may be widely exposed, were it necessary, for hours, while after complete closure of the chest natural respiration is resumed with a minimum of post-operative discomfort. The apparatus is that designed by Dr. Charles Elsberg, and while it is not necessary to resort to it in ordinary cases, in which none of the extraordinary problems of anesthesia are presented, it is of the greatest importance to have it at hand in cases of neck and thoracic surgery, while in cases of opium poisoning or suspended animation, it supplies the method and the means of continuing artificial respiration indefinitely.

The Nurses Loan Fund

THE General Hospital has been more fortunate than many institutions of its class in securing good material for its Training School, but from time to time desirable applicants are lost, because of the long term during which a pupil nurse can earn nothing. Slight though those expenses may be, relatively speaking, for which the Hospital does not provide during the three years of training, they are sometimes more than the would-be nurse can meet. The Trustees have accordingly established a Loan Fund, to be administered under the following conditions:

First: Such loans shall not exceed an aggregate amount of \$75.00 to any one person, and shall be granted only to such as have proved themselves worthy and who have been in the school for a period of not less than one year. In this connection, however, it is further recommended that should instances arise wherein, because of unusual circumstances, it is deemed advisable to advance funds to a pupil before the expiration of the first year of work, the President shall act at his discretion.

Second: Such loans shall be covered by a demand note in favor of the Hospital, bearing 3 per cent. interest from date, but with the understanding that no call for payment shall be made before the first year after graduation.

Third: These loans shall be made on the recommendation of the Superintendent of Nurses, subject to the approval of the President.

Fourth: The fund and all notes covering loans from it shall be in the care of the Superintendent of the Hospital, and a proper account be kept of it.

The fund amounts to about \$600.00.

The Trustees have authorized the Visiting Committee of the Trustees to associate with them others, from outside the Board of Trustees, who are especially interested in hospital work, and to form such sub-committees as seem needed. One such committee will assist in the Social Service Work of the Hospital, and another may have special charge of the Harrington. It is also provided that the Trustees shall be represented by one of their number on each of these committees.

Christmas at the Hospital

The most beautiful feature of Christmas at the Hospital is the singing of the carols by the Trinity Church choir on Christmas Eve. The doors leading into the patients' quarters are everywhere opened; the choir, starting near the center of the building, comes slowly down the corridor, singing as they come, and halts at the entrance of each ward in turn. With the changing hospital population, each year finds a body of patients to whom the event is entirely unexpected, and to see the Christmas spirit at its best one need but stand at the door of a ward and watch the effect as the first faint notes are heard—the languid interest, then the lifted head and the quickened wonder and delight as the song grows in volume, the choristers halt at the ward door, and finally the notes die in the distance.

The Hospital was, as always, effectively decorated, through the generosity of its friends, who also provided the Christmas dinner. The peculiar digestive powers developed by even the most disabled patients in the face of its temptations, have never been given the scientific attention which the phenomenon deserves.

The children had their tree—this year in their own hospital. There is much skepticism in those wards: "He'll never come. I've watched the door all the time." But he always does.

During the winter months religious services are held at the Hospital twice a month. On one Sunday the service is held

in Scatcherd Chapel, under the auspices of the Laymeh's League; the other service, like that of Christmas Eve, is held at the wards, to which the minister and singers go in turn. There is a brief reading, a prayer, and music, bringing that solace to those who must otherwise be deprived of it.

The Social Service Work

THE Social Service Department, instituted last January, presented its first summarizing report at the end of the Hospital's fiscal year, October 1, and was able to make a notable showing. The department itself is small, consisting of a head worker, one assistant and a substitute, and eight volunteers; but they have drawn into co-operation with them fifty-three associations, charitable agencies and public officials. One of the most interesting developments has been the appointment of a committee by the Polish Charity Circle, to act as interpreters for Polish patients. They have been of great service in securing the histories needed by the social workers. The report of this department, which is given in detail in the annual report of the Hospital, is to be commended to the attention not only of humanitarians, but students of social conditions as well. It gives data of significance. Sixteen nationalities were represented in the list of beneficiaries, seven of them furnishing but one case each. On the other hand, one leading immigrant people, who had sixty-three patients in the Hospital during the year, furnished thirty-two cases to the social workers. The two thousand six hundred and thirty-one Americans, in the same time, furnished seventy, the two hundred and thirteen Germans but four. But a more interesting comparison is between this first immigrant group and another, which, in the year, had seventy-nine representatives at the Hospital, but five of whom required a helping hand from the social workers. Are we to infer that the first group is disproportionately "unfortunate" or lacking in thrift? And is the second, which, in proportion to its numbers in the city, provides many more hospital patients than the first group, a stock especially lacking in physical vigor? Whatever an adequate study of these questions might show, we already see that the social service work, while assisting the individual, is also gathering data of social importance. This is a function of the hospital just beginning to be recognized, and it promises a by-product of high value.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

Subscriptions may commence at any time. \$2.00 per year in advance.

VOL. LXVII.

JANUARY, 1912

No. 6

It is better to be a climber, with scarred shins and tibial exostoses, than to have callosities over the ischial tuberosities from being boosted.

Announcements

Any one who wishes copies of the BUFFALO MEDICAL JOURNAL containing his own contribution, or for any other reason, may have them for the asking. We have about ten copies of nearly every number since 1885 and wish to condense our files. Files, as nearly complete as possible, will also be furnished for libraries.

Will you do your part toward making advertisers understand that circulars are a nuisance and a waste of money and effort? Will you help them to realize that legitimate advertising in periodicals is cheap and effective? We are not asking this from any narrowly selfish policy. We do not refer in particular to this JOURNAL, nor merely to medical journals in general but to the whole range of periodicals from the penny newspaper to the literary magazine so aristocratic that there is no club rate on it. Every advertising circular read, adds to the cost and detracts from the possible excellence of every bona fide newspaper, literary and technical magazine.

WILL our readers, especially those who are officers or high privates in medical societies, consider carefully and solely in the interest of the societies, our standing offer with regard to publication of proceedings?

Aside from the regular associate staff, representing the larger cities of western New York, we should like to have a correspondent in each city and village which has a medical popula-

tion of a dozen or more. The duties of the correspondent would be, on a smaller scale, precisely the same as for associate editors—to see that the activities and interests of their locality are properly represented in the JOURNAL and, incidentally to look after the interests of the JOURNAL. The position is highly honorable, not at all onerous and, it must be confessed, not very lucrative, though we shall try to show our appreciation in various minor perquisites. Don't hesitate to volunteer.

For that matter, we should like to have every subscriber send us word of his own doings from time to time, note deaths and other occurrences in his neighborhood and tell his confreres what the JOURNAL is doing.

READ—and heed—the advertisements: By so doing you will get a better and larger JOURNAL. If the reason is not apparent, we will explain.

WE have a number of general and special journals, in various languages, which we would like to turn over to anyone who would review them systematically and skim off the cream for our readers. In particular, we have a most interesting Japanese exchange. We can't read it though, if it were perforated instead of printed in ink, it would apparently make good music on the player-piano.

The Buffalo Water Supply

IT is rather disconcerting, after the lavish expenditure of money and the pushing of the tunnel far beyond the old intake, to learn from Major Bissell's bacteriologic tests, that Buffalo has practically no better water than before. Not knowing exactly how much further expense will be required to rebuild the pumping station, pay damages for the men killed during its construction and bring the equipment to its completion, we can not speak with arithmetic accuracy but it is a fair estimate that every average man, woman and child in Buffalo will pay somewhere between five and ten dollars for an experiment which has failed.

The question is: What are we going to do about it? Short of the ideal solution of establishing sand filtration and disregarding other engineering possibilities which would virtually nullify the whole work up to the present, we admit our inability to answer the question. However, two suggestions may be made, with the understanding that they are purely tentative:

1. The large number of vessels passing in and out of the harbor, above the present intake is a serious danger, not so much on account of the discharges from their own crew and passengers, as of the foul water which they draw from the harbor,

with only a few rods washing in fairly pure water. There are only four ports in the world which have more shipping than Buffalo. Either a new channel should be established below the intake or the intake should be moved a quarter of a mile farther south.

2. As much of the trouble with the water is from roiliness, it is worth considering whether a break wall, running at right angles into the lake from the present one might not furnish a fairly quiet pool, which could be dredged deeply at intervals. Such an arrangement ought to protect from gross contamination along the southern shore, while the natural current would protect from Canadian sewage.

Instruction in Sexual Hygiene

DURING the last few days of October, Dr. Winfield Scott Hall of Chicago, gave several popular lectures in Buffalo on this topic. Last winter, Dr. Richard Cabot of Boston, spoke in the city on a somewhat similar subject. Both of these men are far from the ordinary type of professional lecturers or reformers. Rightly or wrongly, the sincerity of one who earns his living by any form of philanthropic or moral work, is subject to question. Rightly or wrongly, the authority of one who essays such work is questioned, if he undertakes it without special technical training. No such criticism can be made, of either Hall or Cabot. Both are men of attainments and high standing in the medical profession, ballasted by serious interest in a life work. They are in no danger of being capsized by a storm of either approval or disapproval or of being driven out of a rational conservative course, as is the professional reformer, empty of actual knowledge guided merely by enthusiasm and liable to be turned by ambition and even self interest without realizing it.

Jane Addams, in the October *McClure*, writes delicately but plainly of the white slave trade and prophesies its abolition, drawing a parallel to the development of the struggle against negro slavery.

These are only a few of many, manifestations of the awakening of the public conscience. The country is becoming less prudish and more moral—perhaps not more moral in the limited sexual sense, and according to actual practice, but, at any rate, more moral in the general sense of demanding fair play, of protecting the weak, of guiding the ignorant, and of insisting on the relief and prevention of suffering and disease, however caused. It is a sign of morality in the broadest sense, that one does not so often hear pious men compare degenerate and normal sexual practices to the advantage of the former; that it is no longer considered

undesirable, if not absolutely wicked, to prevent blindness, chronic invalidism, paralysis and the like, on the ground that venereal disease is a proper punishment; that even very good persons are beginning to realize that there is a difference between being bad and being dishonorable, filthy and depraved.

As to whether the country is more moral than formerly, in the limited, sexual sense, it is difficult to say. There are no statistics to guide one and general impressions are apt to be misleading for the mere fact that, the older one grows, the more opportunities he has to acquire facts and the less hesitation have others to confide in him. There is immorality enough in all classes of society, in those where it may be excused by poverty, in those where it may be explained by idleness and the habit of self indulgence fostered by wealth, in those where hard work, physical or intellectual, sobriety, religion and refinement might well lead us to expect the highest standards of sexual ethics. After each discovery that some idol has feet of clay, we tend to become cynic, even to the extent of asking how there can be a white slave trade when there is an abundance of free labor. But, against such cynicism, we must fortify ourselves by remembering that the very reason that such instances impress us so forcibly is that they are the exception.

There are some considerations that must not be overlooked in educating the youth in regard to sexual matters. A very important point is that the purity of the little boy is just as important as that of the little girl. Even if this be not conceded as a general proposition, it needs little thought to show that a boy, led astray, usually becomes a source of evil to the opposite sex. Two of the worst rakes we have known were started on their career by teachers. A high school girl recently boasted to a physician that she belonged to a clique that delighted in seducing green boys.

Another point to be remembered by all lecturers and writers of pamphlets on sex topics is that children already have a pretty fair understanding of the subject—derived from older boys, from the surreptitious reading of quack circulars, home medical compends and from that authority which they regard as infallible: the boy that works in the drug store. Many adults fail to realize how much children know and how shrewdly they think.

However great the immediate effect of an exaggerated, insincere talk in which the moral phase of the subject outweighs considerations of physiologic and pathologic fact, the ultimate outcome of a policy of instruction will be to instruct and the discussion, weighing of evidence and seeking for other authority will bring out the absolute truth and discredit any moralist who acts on the supposition that the end justifies the means. It must not

be forgotten that any large audience, especially of older boys and girls, will probably include some already well informed, theoretically and practically, and who are looking for "pointers."

One further item must be borne in mind: the right of parents to prefer the old-fashioned policy of carefully guarded innocence. We must confess to a leaning toward this policy and there are certainly instances in which it works well, although, for the most part, it is a parental theory rather than a juvenile fact. However, it is questionable whether information on sexual matters should be forced on the young contrary to the wishes of parents.

A Suggestion for the Weather Bureau

RESIDENTS of western New York will remember "11-11-11" as a beautiful fall day, somewhat windy, but with the mercury between 65 and 70 F. The day is all the more memorable because the Weather Bureau prophesied snow and only about 50 per cent. of the average temperature. It was still warm and pleasant at bed time and at two o'clock the next morning—as an emergent nearly noon of the 12th, when the prophecy came true. The Christmas snow was similarly delayed for several days.

From the standpoint of the mariner and the farmer, the weather forecasts are reasonably reliable, occasional bad breaks being apparently unavoidable. But the health, comfort and pocket book of the average citizen require a much narrower margin of error and a more definite prophecy of the time at which weather will change. In the individual case, this requirement may seem trivial as compared with the value of crops and of ships, including their freight and passengers. A poor servant spoils ten dollars' worth of clothes in an unexpected rain quite local in its area. An overworked seamstress, overcautious, loses an infrequent chance for a summer day's outing because a storm is prophesied, which does not come off for a day or two. A business man with mild chronic nephritis goes to his office without an overcoat on a warm morning, is chilled through on his return, has an exacerbation of his renal condition, perhaps a pneumonia, and dies within a few days or has an expensive sickness and his life is shortened by two or three years. Some one else puts on heavy underclothing at the Weather Bureau's warning, swelters on a hot day, takes cold when the evening chills his body moistened with sweat and develops rheumatism. Multiply these trivial occurrences by, say, 50 million corresponding to the part of the population which is not directly interested in crops and maritime commerce and they are rather important factors in the incidence of disease, mortality and longevity, even the financial independence of the people.

We have no disposition to find fault with the Weather Bureau. Broadly speaking, for large areas and with a time limit of 24 hours—although we have seen the reports steadily prophecy bad weather for three or four days before it finally came—there has been developed a high degree of accuracy. But, for at least two-thirds of the population, what is needed is not a glittering generality for a large area, to be fulfilled in the course of a day or two, but a definite statement good for a half day or a few hours, for a few square miles and when this can not be made, a candid confession that a prophecy is impossible.

In our experience, local authorities, basing predictions on general observations and modifying them in accordance with their familiarity with peculiar local conditions, can almost invariably make a reliable forecast of the weather in accordance with the practical needs of the great mass of the people. They frequently know that the published reports are erroneous or, at least misleading, so far as immediate local conditions are concerned. The published reports come from headquarters and local stations are not allowed to publish their own forecasts.

With all due respect to the Weather Bureau, we venture to call attention to the fact that dependable prophecies, for local areas and single days or half days are a practical need of much greater importance than discipline or red tape.

The New Tri-State Directory

ONE of the obligations which was assumed by the Medical Society of the State of New York in securing the fusion with it of the seceding Association, was the continuance of the medical directory instituted by the latter organization. At the time of the reunion of the profession of the state, the writer remarked that about all that the Society retained was its title and its hundred years of existence—although it should be stated that this remark was made with no bitterness of feeling and with no implication of regret. Many of the members of the Society have undoubtedly felt that the publication of the directory involved an expense disproportionate to the benefit conferred. Without wishing in any way to make an issue of this point, it may be pointed out that one of the most necessary details in fostering a spirit of professional harmony and fraternalism, is a ready means of keeping in touch with the profession. To have this means in the hands of every physician who takes enough interest in his profession to affiliate himself with its general organizations, tends to preserve ties of friendship, to facilitate correspondence with regard to cases, discussion of published articles

etc., and to render it easy to get together, literally or by correspondence, in the many instances in which it is desirable to secure joint action on important matters of professional and general interest.

For the average physician, and for the average emergency requiring coöperation, this directory answers the purpose. Only occasionally, is it necessary to refer to the larger, more cumbersome and much more expensive directories of national scope.

The present directory occupies about 800 pages net, due to slight condensation of matter, in spite of the increase from 17,416 to 17,624 names for the three states, New York, New Jersey and Connecticut.

We have previously referred to the economic side of statistics of general and of medical population. The profession of this

state has increased by 167 from 1910 to 1911—a trifle over 1 1-5 per cent. The total population is increasing at the rate of nearly 2 per cent. a year—over 25 per cent. from 1900 to 1910, but we must allow for “compounding” as in calculating interest. Last year, there was one physician to every 676 of population. This year, if we estimate an even 2 per cent. of increase of population, the ratio is 681. Outside of greater New York, there were 6,392 physicians in 1911, 6,305 in 1910, giving approximately the same ratios.

It is interesting to compare these statistics with others. Pope listed 13,344 physicians for New York State in 1910—130 less than the tri-state directory—the highest number being for 1906—14,238—while the total of *registered* physicians for 1911 given by the tri-state directory (13,461) is just three more than the listing of Pope for 1904.

All these statistics warrant the optimistic belief that educational requirements and a general disposition to recognize and combat the excess of supply over demand, are really accomplishing results. But we are still far from having realized a condition of equilibrium and the favorable tendency should only stimulate more energetic measures toward securing the economic welfare of the profession.

We would urge the members of the profession to use the directory as a means of keeping in touch with old friends who have removed, and in the other ways suggested. It is important to have the directory as accurate as possible and the BUFFALO MEDICAL JOURNAL will gladly act as a bureau for recording deaths, removals, corrections, additions, etc., for western New York and will transmit the results to the directory committee for the next edition.

PERSONAL

DR. ROBERT C. KENNER of Louisville called on the editor last month—our first personal meeting after a friendship by correspondence lasting over twenty years. Dr. Kenner is the Editor of the *Therapeutic Record*, and a neurologist of note. Louisville has turned out over a third of all the physicians now in practice in the U. S. and still has more medical students than Chicago or New York. The relatively great increase in matriculants recently noted for the University of Buffalo, fortunately seems to be local; at any rate it is not observed in Louisville where the undergraduate medical students are about 800.

DR. JAMES S. PORTER of Buffalo, spent part of December in Toronto.

DR. J. F. VANDENBERG of Merritton, Ont., has been appointed surgeon to the Lincoln County Jail.

DR. ELIJAH JESSOP has been elected to a fifth term in the Ontario Parliament, for Lincoln Co.

MAJOR J. B. COAKLEY of Buffalo, has been appointed Civil Service Commissioner. He is a reconstructed Rebel of the finest type.

DR. CHARLES E. DE M. SAJOUS of Philadelphia, who formerly edited one of the best if not the best of the annual reviews of medical progress and whose work on the Ductless Glands is monumental, has been appointed Supervising Editor of the *New York Medical Journal*. Mr. A. R. Elliott, President of the A. R. Elliott Publishing Co. says in a letter "We feel that you will extend to Dr. Sajous the good wishes, and to us the congratulations, that the occasion warrants." This is neatly and modestly worded and we concur most heartily.

MAJOR W. W. QUINTON, M. D., of Buffalo, Chairman of the Medical Committee on Social Evil, of the Buffalo Society of Sanitary Moral Prophylaxis, issues under date of November 15, 1911, a circular letter to the local profession to ascertain the prevalence of venereal diseases. If you have not replied, please do so, as a foundation of actual fact is needed for further work in the interests of a reform of inestimable importance.

DR. JAMES A. GIBSON of Buffalo has an article on "Exploring the Thousand Islands" in the December issue of *Power Boating*, which took the hundred dollar first prize.

DR. A. E. BARTOO, a University of Buffalo graduate of 1889, formerly of Arcadia, Neb., has lately been visiting relatives in Lackawanna and calling on his old friends in Buffalo, before sailing for Brazil where he expects to locate permanently.

DR. GEO. W. BACHMANN of Rochester, was recently the guest of Dr. A. E. Dean of Lackawanna.

DR. THOMAS J. WALSH of Buffalo, resigned the position of Examiner in Lunacy and his place was taken by Dr. B. Ross Nairn who, in turn, resigned the office of Medical School Examiner. As twenty Assistant Medical School Examiners were eligible to promotion, the matter was decided by lot and luck was chivalrous and gave the place to Dr. Christiana M. Greene, the only woman. The appointment is temporary, pending the establishment of an eligible list by examination.

DR. JULIUS Y. COHEN of Buffalo, has been appointed to the vacancy due to the promotion of Dr. Greene, as above.

DR. DAVID COHN of Buffalo, has been appointed Tuberculosis Inspector, vice Dr. Clarence Hyde, promoted to be Chief of the Tuberculosis Dispensary.

DR. FRANCIS E. FRONCZAK, Health Commissioner of Buffalo, is taking a trip to Havana, Cuba, Mexico and several South American Republics, partly for the sake of a rest well earned, partly to secure their co-operation in the International Congress of School Hygiene to be held in Buffalo in the summer of 1913.

DR. FREDERICK FRISCH, formerly of Buffalo, has removed to Atlantic City.

DR. FRANK H. RANSOM of Buffalo, made a trip to Boston and New York in December.

DR. LUCIEN HOWE of Buffalo, has moved from the corner of Huron St. and Delaware Ave. to 520 Delaware Ave.

DR. CLAYTON M. BROWN of Buffalo, is contributing a series of articles on nursing in diseases of the eye, ear, nose and throat. to the Dietetic and Hygienic Gazette.

DR. GUY L. McCUTCHEON of Buffalo has moved to 520 Potomac Ave., corner of Claremont Place.

DR. GROVER W. WENDE of Buffalo, presented a paper before the Dermatological section of the Rochester Academy of Medicine on December 13.

DR. J. L. ROSEBOOM of Rochester, spoke on "Esperanto as the universal language of Science" at the Rochester Academy of Science, December 11.

DR. JAMES F. SHERMAN (Buffalo 1885) of Rochester was operated on and has made a good recovery.

DR. M. A. KING of Rochester, has also made a complete recovery and has just removed to 21 East Avenue.

THE appointment, by Mayor Baker, of Dr. F. D. Crim as Health Officer, and Dr. F. R. Ford as deputy health officer for Utica, gives very general satisfaction.

Dr. Crim has been in general practice for about thirty years, is a physician of excellent attainments and repute, and in every way well qualified for the head of our health department.

Dr. F. R. Ford is especially well fitted for the position of deputy, being an eminent bacteriologist, and having served one term in this position very acceptably with Dr. Peck as health officer.

THE home of Dr. A. H. Baker (Buffalo '85) of Elmira, was partially destroyed by fire the night of December 18th. The damage was about \$2,000, covered by insurance. Dr. Baker's office was not damaged.

DR. PARKER SYMS invites the profession to his surgical clinics at Lebanon Hospital, New York, Wednesdays, 3 P. M. till May 1.

OBITUARY

DR. O. E. EVANS, formerly of Akron, died of paralysis in Guthrie, Iowa, November 21, 1911.

DR. GEORGE LEROY RICE, retired, died at Salamanca, November 27, 1911.

DR. LAFAYETTE RINKLE, University of Michigan and Long Island College Hospital, 1874, died at Boonville recently.

DR. EDWARD MEANY, University of Buffalo, 1887, died at Ithaca, November 21, of cerebral haemorrhage, aged 46. He was the first Health Officer of Ithaca and a former president of the Tompkins Co. Medical Society.

DR. JAMES FREDERICK WILLIAM ROSS, Trinity, 1878, died of double pneumonia following an automobile accident, November 17, 1911, aged 55. He was prominent as a gynaecologist and surgeon.

SOCIETY MEETINGS

THE 90th annual meeting of the Medical Society of the County of Erie was held in the Buffalo Library Building on December 13, 1911, an unusually large number of members being present.

Treasurer, Dr. Albert T. Lytle, presented his annual report.

Preamble and resolution, in reference to appointment of a Surgeon General of the U. S. Public Health and Marine Hospital Service to succeed the late Dr. Walter Wyman, were presented by Dr. Lucien Howe.

Dr. H. J. Mulford, Chairman of the Committee on Necrology, submitted a brief report on the deaths of members during the year.

Dr. H. R. Hopkins, Chairman of the Committee on Public Health, submitted a report, illustrated by stereopticon, in which he directed attention to inadequate ventilation of public schools, antivaccination agitation and the necessity for combatting and suppressing same, typhoid fever prevalence in Buffalo, Niagara Falls, Lockport and the Tonawandas, resulting from the pollution of water supply by sewage.

Dr. C. A. Wall, Chairman of the Committee on Membership, recommended the election of Dr. Roy C. Fisher, 42 Lawrence Place and also of Dr. Joseph W. Young, 131 Allen Street, the latter transferred from the New York County Society. Both were elected to membership.

President Dr. Daniel McClure gave his annual address which was directed to be printed in the *Buffalo Medical Journal*. Incorporated in this motion was the following "that it is the sense of this society that no legislation pertaining to public health be considered by the State Legislature unless it emanates from the State Board of Health."

Report of the Board of Censors was presented by Chairman Dr. George L. Brown who gave the results of various prosecutions for violations of the medical laws and stated that several

physicians are under indictment for alleged attempted abortion, and that the famous Porter Medical Co. has been driven from the city.

The Committee on Division of Fees was continued and requested to make a special report at the February meeting.

The election of officers resulted as follows:

President, Dr. Thomas H. McKee; First Vice-President, Dr. J. F. Whitwell; Second Vice-President, Dr. John V. Woodruff; Secretary, Dr. Franklin C. Gram; Treasurer, Dr. Albert T. Lytle; Censors, Drs. Irving W. Potter, Francis E. Fronczak, Arthur G. Bennett, Lawrence Hendee and John D. Bonnar; Chairman, Committee on Legislation, Dr. F. Park Lewis; Chairman, Committee on Public Health, Dr. Henry R. Hopkins; Chairman, Committee on Membership, Dr. Charles A. Wall; Delegate to the State Society, Drs. Albert T. Lytle, Julius Ullman, Julius Richter, J. F. Whitwell.

Retiring President McClure introduced President-elect McKee, who briefly thanked the members for the honor bestowed upon him.

Chemung County Medical Society

THE annual meeting of the Chemung County Medical Society was held December 19, 1911, at the Society's rooms in the Federation Building, Elmira, N. Y.

The following officers for 1912 were elected: President, C. Haase (Buffalo '02), Elmira, N. Y.; Vice-President, Wm. Brady (Buffalo '02), Elmira, N. Y.; Secretary, C. F. Abbott, Elmira, N. Y.; Treasurer, G. V. R. Merrill, Elmira, N. Y.; Censors, H. W. Fudge (Niagara '93), Elmira, N. Y., R. G. Loop (Buffalo '97), Elmira, N. Y., S. Voorhees, Elmira, N. Y.; State Delegate, R. G. Loop, Alternate E. L. Bush, Horseheads (Buffalo, '02); VI District Delegate, H. W. Fudge, Alternate, C. Haase; Chairman Public Health Commission, A. H. Baker (Buffalo '85), Elmira, N. Y.; Chairman Commission on Legislation, R. P. Bush (Buffalo, '74).

MR. THEO. HORTON, Chief Engineer State Health Dept., addressed the Society on "Water Filtration." In the evening, he lectured before a public mass meeting under the Society's auspices at Convention Hall on "Sewage Disposal"—both lectures illustrated with stereopticon.

An amendment proposing to hold eight regular meetings of the society annually, instead of four as at present, was defeated.

An amendment was proposed increasing annual dues to \$5.00 and rendering delinquent members ineligible for office. This will be voted on at the next annual meeting.

WM. BRADY,
Secretary.

THE Buffalo Academy of Medicine will hold meetings as follows in January 1912, in the Public Library Building. The meetings begin at 8.30 P. M. (Physicians' standard time) and physicians visiting in Buffalo are cordially invited both to attend and to make themselves known.

January 2. (Surgery) Diagnosis of Intra-abdominal Conditions Presenting Acute Manifestations, Dr. Nathan Jacobson, Syracuse.

January 9. (Medicine) "Some Reasons why Incipient Pulmonary Tuberculosis is not Diagnosed," Dr. John H. Pryor, Buffalo.

January 16. (Obstetrics and Gynaecology) Conservative Surgery for Benign Tumors of the Uterus, Dr. Frederick Emil Neef, New York City.

January 23. (Pathology) Researches on Kidney Function, Dr. John T. Geraghty, Baltimore.

BOOKS AND AUTHORS

Text Book of Physiology, Wm. H. Howell, Ph.D., M.D., Baltimore; published by W. B. Saunders Co., Philadelphia and London, 1911. 1018 pages, illustrated, cloth, \$4.00, half morocco, \$5.50.

This book, large as it is, is net physiology. The usual lengthy discussions of histology, embryology and chemistry are conspicuous by their absence, though necessarily alluded to under various subdivisions. The author also departs from the ordinary in starting with the phenomena of muscular contractions. Some recent statements as to the electric nature of nerve-impulse, are, apparently refuted. The older, conservative statements that nerve impulse cannot be electricity because of its slowness, are corroborated and the interesting facts that nerve impulses travel at different rates in different types of animal are developed. What nerve force is, remains uncertain. The brief discussion of diet and calories is lucid, though we are somewhat disappointed not to have found a general law for deriving the caloric value of a proximate food principle from its chemic formula. Neither do we find a clear and elaborate tabular presentation of the nine or ten special senses. The exact nutritive value of nutritive enemata is not given, though absorption and digestion in the large intestine are discussed. The experiments cited with regard to the effect of maintaining the congenital condition of alimentary sterility, are contradictory and the writer is left in doubt as to whether intestinal bacteria are necessary, harmful or merely inevitable. A great many similar disappointments are in store for the reader. To put it otherwise, the author does not let his

imagination run riot; he does not distort the truth nor anticipate discovery in order to make a subject complete and logical. He has written not scientific fiction but cold fact. The size of the work in the absence of speculation, lines written for the gallery, and the minutiae of vivisection indicates its genuine thoroughness.

Diseases of Infants and Children, by Henry Dwight Chapin, A.M., M.D., and Godfrey Roger Pisek, M.D., New York. Published by Wm. Wood & Co. 1911. 636 pages, 181 illustrations, 11 colored plates. Cloth, \$4.50.

The most striking feature of this work is the large amount of interesting material not to be found in other standard text books on the subject and which the average physician does not know. For instance, a few weeks ago, a friend informed us of a case of abortion of a foetus without an umbilic cord. This seemed to both of us, at first thought, impossible and, at least, unprecedented. Chapin and Pisek's book opened by accident to an illustration of a mammary (kangaroo) foetus and a full explanation of marsupialism, the foetus being without placental connection, and attaching itself after birth to the teat in such a way as to afford a substitute for placental nutrition. The illustration of the six phases of nutrition, from the ovum drawing on its yolk to the adult seated at a well spread table—the fourth phase of breast feeding being included—is almost of the nature of a cartoon. In fact, the usual consideration of paediatrics is enlivened in a most original and practical manner.

Treatment of Fractures, 7th edition, Dr. Charles L. Scudder, Boston, published by W. B. Saunders Co., Philadelphia and London, 1911. 708 octavo pages, 990 original illustrations, \$6.00 in buckram, \$7.50 in half morocco.

For good measure, the author adds what he very modestly calls "Notes upon a few common dislocations." A book that furnishes 14 illustrations to every 10 pages, and original illustrations at that, evidently comes close to being an object lesson. It would be a valuable clinical atlas, with no text at all. With a very lucid and full, though concise text, it lacks only the master's voice to make it a systematic series of clinics. The bones themselves, normal and variously fractured, are shown; when necessary, the relationship of muscles, viscera, vessels, etc., is also shown and almost every conceivable lesion of viscus, nervous system, and other structures, including the results of contusion and of infections liable to complicate fractures, is also depicted. X-ray appearances are systematically given and dressings and methods of manipulation are both described and illustrated. The

book is so nearly perfect that we are tempted to express the fear that an incompetent man, with no experience, might see a fracture case, surreptitiously consult this book and, in five minutes, spent in reading and glancing at the pictures, feel prepared to deal as an expert with the most difficult complicated fracture. Some day, the author may regret that he has left nothing for an eighth edition—but the man who can bring out such a work, is always a harsh critic toward himself and can doubtless find something to improve and more material to add. Rarely does one encounter a book that appears to be so nearly the last word that can be written on a subject.

A Quaint Tale of the Origin of Syphilis.

When you have finished Fracastor's tale—THE ORIGIN OF SYPHILIS—you will lay it down and say: "Now that's a book worth while." Little did Fracastor dream way back in 1530 when he was writing his famous work, that in 1911 an American publisher would issue an English translation.

Finishing his delightful mythologic origin of syphilis, Fracastor plunges into a description of its symptoms and manifestations, which, for word painting cannot be surpassed. Possessed of a keenly observant mind, and the wielder of a pen that records his thoughts with cameo-like distinctness—Fracastor has given us what is truly a masterpiece. While science has lately rewritten the story of syphilis, and may rewrite it again a generation hence, yet Fracastor's book will live for, verily, it is one of man's imperishable works. The book may be secured from the Philmar Company, Fidelity Building, St. Louis, Mo., for two dollars.

Veterinary Bacteriology, by Robert E. Buchanan, Ph.D., Professor of Bacteriology, Iowa State College of Agriculture and Mechanic Arts, W. B. Saunders Co., Philadelphia, 1911. Octavo, 516 pages, 214 illustrations, cloth, \$3.00.

As is customary, the term bacteriology includes the discussion of yeasts, molds and protozoa, as well as bacteria, and the infections affecting the domestic animals generally, fowls, etc., are treated fully. So far as the general scientific basis of bacteriology is concerned, and the description of technic, this work is equally valuable to the student of human pathology. Much practical information is given as to the preparation of antitoxins, vaccines, etc. We wish that every physician could read this work so as to obtain a definite idea of the infections of human beings likely to be communicated to the lower animals and vice versa.

This is a matter regarding which many erroneous ideas prevail, among them the notion that the lower animals are, in general, highly resistant to disease, as compared with man.

Diseases of the Stomach, by **Max Einhorn**, M.D., New York, published by Wm. Wood & Co., New York, fifth edition, 1911. 531 pages, 112 illustrations, cloth, \$3.50.

While smaller than many of the standard stomach books, Einhorn's is especially interesting and valuable on account of the many inventions of his own fertile and ingenious brain. For example, we may mention his vacuum bottle for peptic tests with ricin; his radium holders, pyloric dilator, gastroscope, microscopic study of gastric exfoliations, etc. Such studies not only afford definite means of investigation but stimulate the reader's powers of observation and scientific imagination. There is only the necessary minimum of established and trite material in Einhorn's book, and a maximum of the novel and interesting. Best of all, the author's clear, forcible though never dogmatic style, invites criticism. For instance it seems to us that hyperchlorhydria should be definitely limited to an excess, of notable degree, of hydrochloric acid itself and we should be loath to include under this term all cases with a total acidity of over 60 degrees unless the HCl itself were disproportionately increased. So, too, achylia gastrica deserves a fuller treatment, from the standpoint of a wider and less personal experience and we would like to see a positive statement regarding Knapp's contention that it is the same as or inseparably connected with pyloric relaxation. The book would be improved by greater attention to nomenclature. These, however, are very minor defects. It is a strong, virile treatise, which makes one think, and argue with himself and, in most instances, the more one thinks and argues, the more likely he is to come around to the position of the author.

Collected Papers by the Staff of St. Mary's Hospital, Mayo Clinic, 1910. Published by W. B. Saunders Co., Philadelphia and London, 1911, 633 pages, 291 illustrations, cloth, \$5.50.

The papers consist both of elaborate reports of cases observed, with thorough pathologic and clinical study and statistic grouping of material but of essays on miscellaneous subjects, as notes of Italian Surgery, the Commencement address by Dr. W. J. Mayo at Rush Medical College and a number of monographs on matters not entirely of a surgical nature. We need scarcely say that the work is characterized by thoroughness and large practical experience.

Refraction and Visual Acuity by **Kenneth Scott, M.D., C.M., F.R.C.S. Edin**—Rebman Company, New York, Publishers.

This treatise is written primarily for the general practitioners

of Great Britain and the British possessions, therefore much that will be of value to them is not very useful to the American physician. For instance, the visual requirements of the Dublin and South Eastern Railway, the Central South African Railways, or the Great Indian Peninsular Railway, though of importance to the officials conducting such examinations, are hardly likely to prove of much interest to the general practitioners of the United States.

The writer is a firm believer in retinoscopy, and in a simple and clear manner points out its many advantages. The reviewer having constantly used this method for twenty years is in substantial agreement with his views. However, on one point—the use of the plane mirror—exception must be taken to the statement that “no after calculation is required; as it is the strongest convex lens that still preserves the hypermetropic movement before it is reversed that indicates the amount of error there, and in myopia it is the weakest concave glasses first producing the hypermetropic movement that indicates its measure.” This statement would be true if one stood at theoretic infinity (20 ft.) from the patient while making the examination, but as this is not feasible, and one must perforce sit within arm’s reach, a metre at the outside, at least a $+1.00$ D. must be deducted, as also when the concave mirror is used.

The practice advocated of giving a weaker glass for reading in cases of myopia, is not generally followed in this country, the feeling being that it is better to encourage the ciliary muscle to do its physiologic work, therefore unless there is absolute loss of accommodation, most oculists prefer to give a full or nearly full correction for constant wear.

A price-list of lenses in London, presumably, shows that the United States does not need a tariff to protect her spectacle-makers from British competition as the prices quoted overage about 20 per cent. more than the best American opticians charge.

The chapter on color-blindness is concise and clear, and the essentials of the test have never been better explained in so few words.

The use of a cycloplegic is urged in most cases. This is gratifying to American ophthalmologists, as they have been the greatest advocates of their use. Recent literature seems to indicate that their British colleagues are now in agreement with them.

Within The Mind Maze, or Mentonomy, the Law of the Mind, by **Edgar Lucien Larkin**, Director of the Lowe Observatory. Published by the Standard Printing Co., Los Angeles, 1911. \$1.00 (pages 336—523, continued from *Radiant Energy*, of the same series), cloth.

The sub-title, should obviously be changed to phrenonomy or psychonomy. This is an interesting book, of a speculative, metaphysical nature, leaning in places toward theology, based on the author's life work in astronomy and its fundamental sciences. Every man of a meditative nature, especially one at work along lines of natural science and mathematics, unless of the type that turns at once to details or is hopelessly prosaic and material, has evolved such thoughts in his leisure moments. Usually, for fear of being called a dreamer or from the false shame which most Christian races feel at displaying religious emotions except at stated times and places, he refrains from writing them down. Professor Larkin has held the mirror before us, where we can see our own naked mind. It is the fashion to decry speculation, to uphold the materialistic doctrine "Don't think, experiment." Having experimented, observed and studied material things, Professor Larkin boldly claims the right to think, to imagine, to apply mathematic concepts to the non-material.

Text Book of Embryology by **Frederick Randolph Bailey**, A.M., M.D., and **Adam Marion Miller**, A.M., of Columbia University; published by Wm. Wood & Co., second edition, 1911; 672 pages, 515 illustrations, cloth, \$4.50.

The physician whose knowledge of embryology dates back a number of years will find a great mass of fact in this book with which he is unfamiliar and he will be impressed with the very different use of the loud and the soft pedal in different parts of the science. Formulae as to the size of the embryo at different periods of gestation have a distinct medico-legal or medico-social value in many cases and a clear understanding of embryology aids greatly in the conception of the development of neoplasms, in the limitations of various disease processes and in the spread and recurrence of disease. Both the authors and the publishers are to be congratulated on the general excellence of the work.

Physicians' Visiting List, 1912, P. Blakiston's Son & Co. Week-day dates for the year or perpetual, \$1.25 to \$1.50 according to number of patients. For 2 half year volumes, with week-day dates, \$2.25—\$2.50. Monthly edition, \$1.00—\$1.25.

This book is familiar to physicians and preserves the same convenient size and style in vogue for many years. We take this occasion, however late, to acknowledge the courtesy of the firm in presenting a copy to each member of the graduating class of the University of Pennsylvania, 23 years ago.

Medical Chemistry and Toxicology, by **James W. Holland, M.D.**, Philadelphia; published by **W. B. Saunders Co.**, Philadelphia, 3d edition, 1911. Octavo, 655 pages, 8 colored plates, 112 illustrations. Cloth, \$3.00.

This work begins with a concise presentation of physics as a foundation for chemistry. It then deals with chemistry proper, and a little less than half of the book is devoted to organic and physiologic chemistry, treated in such a way as to make it readily available for diagnostic use. The colored diagram of the composition of a hydrocarbon flame is particularly instructive. The summary of color reactions of the urine, is of great value as an object lesson. That for gastric analysis makes us wonder whether our own color vision is normal. The work is replete with tables, diagrams, etc., of the utmost value in summing up scientific information and making it readily available.

Progressive Medicine. (Quarterly, paper covers), December 1, 1911. (Lea & Febiger, Philadelphia and New York, \$6.00 yearly).

The present volume deals with the literature of the alimentary canal, etc., kidneys, genito-urinary diseases, certain phases of surgery and practical therapeutic advances. It is a most excellent review of periodic literature, not only for the typic "busy practitioner" but for the student who needs references for research. The only unfavorable criticism that can be made is that some of the editors make their personal judgement a little too prominent with a resulting Rooseveltian style. But, from experience, we realize that this fault is very difficult to avoid and it is not so great as the impartial chronicling of good, bad and indifferent opinions of the great mass of writers.

Text Book of Pathology, by **Francis Delafield, M.D., LL.D.**, and **T. Mitchell Prudden, M.D., LL.D.**, Columbia University, published by **Wm. Wood & Co.**, New York, ninth edition 1911. 1114 pages. 13 plates and 687 illustrations, in black and color, cloth, \$5.50.

As a matter of interest, we have looked up the third edition, which has been a useful companion for many years. The date of the ninth edition shows an increase of 22, the pages of over 500, the plates are all new and the illustrations are more than three times as numerous. Both authors have been increased by 600—LL.D. The price shows no increase at all. Seriously, it is difficult to review a book of this established reputation. It is not merely a pathology in the old, limited sense, but a bacteriology, a guide to post mortem examinations and, to a certain extent, a work on clinical pathologic diagnosis.

A Manual of the Practice of Medicine, 9th revised edition, by **A. A. Stevens**, A.M., M.D., Philadelphia; W. B. Saunders Co., Philadelphia, 1911; 12mo, 573 pages, illustrated, flexible leather, \$2.50.

This is a very brief, systematic compend of practice, designed especially for the use of students, but by no means unworthy the attention of the graduate. The style is clear and the information imparted definite though, obviously, not sufficiently complete for an exhaustive study.

Practice of Medicine, **James M. Anders**, M.D., Ph.D., LL.D., Philadelphia; 10th edition, 1911, W. B. Saunders Co., Philadelphia and London. 1328 pages, illustrated, \$5.50 cloth; \$7.00 half morocco.

This well known and well liked text book has been revised to date. The usual arrangement is followed and it is well adapted both to the use of students and practitioners.

THE C. V. Mosby Company, of St. Louis, has announced the publication of a book on Pellagra, to be ready by January 1, 1912. This book is being prepared by Doctor Stewart R. Roberts, of Atlanta, Ga., who has just returned from Italy, where he studied the disease in its natural habitat. While in Europe the doctor made extensive research regarding the etiology and treatment of Pellagra, and the data contained in the book will reflect the latest and best work that has been done in connection with this disease, making it a reliable guide to those seeking information on the subject.

International Clinics, Vol. 3, 21st series, 1911, J. B. Lippincott Co., Philadelphia.

This publication, which has entered the gap between the magazine and the formal text book, maintains a high standard of excellence. A new department, Economics of Medicine, is included. The present volume contains an article by only one man in the special territory of the BUFFALO MEDICAL JOURNAL, Dr. A. L. Benedict, The Investigation of the Duodenum. Dr. Thomas R. Brown of Baltimore contributes an article on the relationship between Gastric and Urinary Acidity, closely following the lines of an article on the same general subject by the former, in Vol. 1 of the 18th series, 1908. This corroborates the novel fact that there is no practical "acid and alkaline tide" of urinary excretion, converse to acid and alkaline digestive secretion and that gastric and urinary acidity are not opposed in degree.

Note by the editor: (The allusion to our own work by the reviewer, is in accordance with the general rule to notice, in all

exchanges and books for review, the work of men in western New York, corresponding approximately to the 5th to the 8th District Branches. As the article in question consists largely of confessions of ignorance and of failures to obtain the brilliant results claimed by some, we feel that it is not immodest to let the review stand.)

The Way with the Nerves, Letters to a Neurologist on Various Modern Nervous Ailments, Real and Fancied, with Replies thereto Telling of their Nature and Treatment, by **Dr. Joseph Collins** of New York. Published by C. P. Putnam's Sons, New York & London, 1911. 313 pages, \$1.50.

It is difficult to do justice to this book. It is not adapted to lay use except in the cases in which the physician wishes his patient to understand his own neurotic condition and is willing also for him to realize some of the foibles of the profession entertainingly discussed under the heading of the Bedside Manner. Nor will the neurologist nor even the shrewd general practitioner find much that is absolutely new to him. Nevertheless, it contains a great deal of valuable information and many hints as to the tactful management of neurotic cases.

FIFTEEN months ago Mrs. X. came to me for treatment, giving the following history: Six years previously she had a miscarriage, since which she has been troubled with a profuse leucorrhœa of a very foul odor. At her menstrual period she suffered greatly and flowed excessively. On examination the cervix was found to be nearly four times its normal size and so badly eroded as to have every appearance of a cancer and had been mistaken for such by one physician. The uterus was soft and boggy and very much enlarged. She had been to the hospital on two occasions and each time had been curetted, but this seemed only to aggravate the general condition. For over a year I treated her with every means at hand but to no purpose. I was making preparation for an operation, which would have meant the removal of the uterus, when my attention was drawn to Glyco-Thymoline and I determined to give it a thorough trial before operative measures were to be further introduced. An intrauterine douche of Glyco-Thymoline in a 25% hot solution was administered and lamb's wool tampons saturated with pure Glyco-Thymoline were used. She began to improve from the first application. The leucorrhœa became less and the odor disappeared entirely. The cervix took on a healthy look. The uterus decreased in size and became firm; in fact she is now nearly well after nine weeks' treatment with Glyco-Thymoline.

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ORIGINAL COMMUNICATIONS

The Normal and Pathologic Physiology of the Hypophysis.

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THE hypophysis or pituitary body, first assumed clinical significance when Marie ascribed acromegaly to changes in this organ, although earlier writers had noted its enlargement in pathologic giants. Changes in the hypophysis are no doubt responsible for many of the giants mentioned in history, and it has played a role both in mythology and art. The sculptures on certain French and Italian churches show that the giants pictured there are in reality acromegalic individuals. This anomalous development, the giant, is in 40 per cent. of the cases, according to Sternberg, due to changes in the hypophysis.

Following the disturbances in growth, the next phase of this subject to attract attention was the discovery by Howell and Schafer of a substance in the posterior lobe capable of producing a marked rise in blood pressure and resembling in many respects extracts obtained from the suprarenal gland. These discoveries did not, however, by any means exhaust the physiologic possibilities of this gland, as recent investigations have greatly enlarged the field of its functional activity. It might be well, before discussing this organ, to refer briefly to its gross and microscopic anatomy.

Embedded in the sella turcica, the hypophysis is composed of two lobes entirely different in origin and structure. Embryologically the large anterior lobe arises from an invagination of the buccal ectoderm; the posterior lobe from an outgrowth on the floor of the third ventricle of the brain, these two portions coming in contact form the hypophysis. The anterior lobe is, therefore, an epithelial structure, arising from mouth epithelium, the posterior lobe nervous tissue. The epithelial cells are differentiated into two types, glandular and simple columnar. The anterior lobe is composed almost entirely of glandular epithelium, many of its cells containing granules characteristic of secreting cells, adjacent to the cleft there is a thin coating of columnar epithelium which is reflected onto the adjacent posterior lobe,

and in the ox constitutes about one-third of its entire thickness. This columnar epithelium is known as the *pars intermedia*; its cells are less distinctly granular and are arranged in man in the form of islets, many of these hollow and filled with colloid. This colloid material is thought to be discharged into the infundibulum, which enters the *pars nervosa*, and from here passes through its canal to the third ventricle. In the cat, the infundibulum extends as a hollow canal through the *pars nervosa* to the *pars intermedia*. In the cleft between the two lobes, we not infrequently find quite large and rather firm colloid masses evidently secreted by the *pars intermedia*. The *pars nervosa* is solely nervous tissue and evidently does not have any secretory functions. In man the line of demarcation between the *pars intermedia* and *pars nervosa* of the posterior lobe is not well defined, in the ox, however, the two structures are distinct. From the above description, it is seen that we have in the hypophysis three distinct structures, the glandular anterior lobe, the *pars nervosa* and the intervening *pars intermedia*, all to be taken into consideration when dealing with the functions of the organ.

In the following short report it is impossible and inadvisable to take up a full argumentative discourse on all points under discussion, but we will rather endeavor to confine ourselves to justifiable conclusions.

First to be considered is the EFFECT OF ENTIRE REMOVAL OF THE HYPOPHYSIS. There has been considerable discussion in the past as to whether the hypophysis was an organ essential to life. The conflicting reports upon this phase of the subject can be largely accounted for, first by the difficulties of the operation with the attendant infection leading to a fatal termination, and second, the uncertainty of a complete removal. This last point is of especial importance as it has been shown that even a very small fragment of the anterior lobe will undergo rapid hypertrophy and may function sufficiently to greatly modify the final results. Only those reports can be safely accepted where after apparent complete removal and survival of the animal, a later microscopic examination fails to reveal any remnant of the gland. Even in the total removals, fragments of the *pars intermedia* always remain behind attached to the stalk. Present evidence indicates that when the removal is complete there follows a train of symptoms which invariably terminate fatally. The animal recovers from the immediate effect of the operation and in the case of puppies may live two or three weeks. Sooner or later, however, there is evidence of disturbance. The animal becomes apathetic, the temperature decidedly subnormal, the gait stiff and unsteady. When standing or walking the back is arched,

the hind feet placed forward and walking becomes more and more difficult. The pulse is frequent and irregular. Infrequent coarse muscular twitchings may follow slight external stimuli. Finally the animal sinks into coma and very gradually dissolution occurs. It has not been possible to prevent this fatal termination by grafting or feeding hypophysis.

The posterior lobe alone may be removed without serious disturbance. The animal recovers completely and remains apparently normal. Removal of the anterior lobe, however, is followed by the same group of symptoms as total extirpation. It is evident, therefore, that the anterior lobe of the hypophysis is the portion of the organ essential to life. This might perhaps be anticipated from its glandular nature.

Certain interesting phenomena may be observed after partial removal of the anterior lobe. When the proper amount is left, the animal may continue to live for an indefinite period of time. For a few weeks after the removal, the only observed pathologic disturbance is marked polyuria without glycosuria. Later the thyroid hypertrophies, the animal gains in weight, becomes fat and apathetic, fails to come into heat and at autopsy the ovaries are atrophied, the uterus infantile and the mammae undeveloped. In such an animal, examination of the hypophyseal region shows that the pars nervosa had undergone atrophy, being replaced by hyperplastic pars intermedia. It is quite difficult to interpret the changes described. It is not improbable that the polyuria is due to hyperplasia of the pars intermedia, the gain in weight as we will see later, from atrophy of the posterior lobe. The atrophy of the reproductive organs will be discussed in detail later.

Summarizing the effect of operative procedure on the hypophysis, it can be said complete removal is followed by characteristic disturbances and fatal termination. Removal of the posterior lobe is not inconsistent with apparently normal health. Removal of the entire anterior lobe gives the same results as removal of the entire hypophysis. Removal of a portion of the anterior lobe is followed by polyuria and atrophy of the sexual organs.

THE HYPOPHYSIS AND GLYCOSURIA.

Marie in his report on acromegaly called attention to the frequency of associated glycosuria. It is generally accepted at the present time that patients with acromegaly frequently have a glycosuria, and Borchardt in a recent review of the subject, reports that 40 per cent. of these patients have either a spontaneous glycosuria or a lessened sugar tolerance. The glycosuria in these cases, on account of its transient character is frequently overlooked, in many cases, it permanently disappears, and the amount

of sugar in the urine is not infrequently independent of the character of the diet. With the presence in acromegaly of an enlarged anterior lobe, the question arises whether the glycosuria is due to pressure on the hypothetic sugar center in the region of the tuber cinereum or the result of disturbed secretion of the hypophysis. If the latter view is accepted, is the glycosuria due to the direct action of the secretion, or secondary to changes in other ductless glands? Changes in the thyroid and suprarenal are not infrequently associated with acromegaly, and both of these organs are concerned in sugar metabolism.

Although it is too early to make any absolutely definite statements on this subject, it is generally conceded that glycosuria does not accompany hypophyseal tumors except when associated with symptoms of acromegaly. As acromegaly is without much doubt due to hyperplasia and supersecretion of the anterior lobe, we should expect if the glycosuria were due to the direct action of the secretion, that extracts of this portion of the hypophysis, when administered to animals, would disturb sugar metabolism. Considerable work has already been carried out on this phase of the subject. The results however, are so at variance that it is advisable to review the matter critically. Borchardt injected subcutaneously into rabbits extracts prepared from the entire hypophysis and obtained in about 80 per cent. of the animals a more or less marked glycosuria. The sugar appeared three or four hours after the injection and rarely persisted for more than twenty hours. The extreme susceptibility of the rabbit to disturbances of sugar metabolism, modifies the significance of these results. Spontaneous glycosuria is common in rabbits, and very slight disturbance or manipulation may excite it. Lewis, Matthews and myself working on this subject found that glycosuria could be so readily excited in the rabbit that the marked disturbance following the injection might easily cause it. Borchardt later repeated the experiments on dogs. Five of the seven animals reacted with a glycosuria, but on analysis in none of these were the results actually conclusive. Two gave sugar only when on an excessive carbohydrate diet. A portion of the pancreas had previously been removed from two of the dogs, the animals, however, being sugar free. When on a proteid diet, but, after injecting extracts of the hypophysis, glycosuria appeared. Finally the other positive case, had following the injection, a very severe and prolonged tremor—a very common experience after injection of extracts from the hypophysis. This prolonged tremor by shaking out the glycogen from the muscle could readily give rise to a transitory glycosuria. Turning to other investigators, Pal and Franchini both reported negative results. With these conflicting re-

ports Lewis, Matthews and I decided to modify these experiments by injecting separately anterior and posterior lobe in order to determine what portion of the hypophysis was responsible for the glycosuria. Dogs were injected either intraperitoneally or intravenously with freshly prepared extracts. In all, thirty animals were thus treated, fifteen with extract of the anterior lobe and fifteen with extract of the posterior lobe. In only three of these animals were we able to detect a glycosuria although a reducing substance was frequently found in the urine. The amount of sugar present as determined by the polariscope and fermentative test did not exceed $\frac{1}{2}$ per cent. As none of the positive cases had a polyuria and as the glycosuria was of only a few hours' duration, the total amount of sugar eliminated was very small. Two of the positive cases received extracts of the anterior lobe; one of the posterior lobe. If we are justified in concluding from these results that extracts of the hypophysis may excite a glycosuria, it must be due to a substance present in both lobes. As the only structure common to both is the pars intermedia it may be suspected that this is the portion of the organ responsible for the glycosuria.

Turning to another phase of the subject, Goetsch, Cushing and Jackson found disturbance of sugar tolerance after removal of all or part of the hypophysis. Following the operation there was a temporary glycosuria which they attribute to setting free an excessive amount of secretion in the manipulation of the organ. On account of the readiness with which anaesthesia excites a glycosuria in animals, this must be considered as a possible factor. We have done considerable work upon this subject and find quite constantly a glycosuria in dogs after ether anaesthesia prolonged beyond an hour. They also report that after removal of the posterior lobe following the temporary glycosuria, there is an increased sugar tolerance, so that larger quantities of sugar than usual can be administered without the appearance of sugar in the urine.

Summarizing the role of the hypophysis in glycosuria, it may be said that acromegaly is very frequently associated with a glycosuria. Extracts of either the anterior or posterior lobe, when injected in dogs may occasionally cause a glycosuria. Removal of the posterior lobe apparently increases the animals' sugar tolerance.

EFFECTS OF THE HYPOPHYSIS ON THE METABOLISM AND GROWTH OF INDIVIDUALS.

The hypophysis is no doubt an important factor in the physical development of both man and the lower animals. As has been already stated, about 40 per cent. of the so-called giants owe their

abnormal development to changes in this organ. The disturbance of development may be divided into two types not entirely distinct, but rather overlapping in many results. The striking feature in acromegaly is the overgrowth, especially of the extremities. These changes are in part due to enlargement of the bones, but also in a measure to increase in the subcutaneous tissue, and in some of the individuals there is a marked tendency to general adiposity. In addition, while the external genitalia may be hypertrophied, the uterus, ovaries and testes are frequently hypoplastic. The disturbance in the hypophysis responsible for the bone changes, when they occur early in life, leads to gigantism; when taking place in adult life, to acromegaly. The other type of disturbance known as Fröhlich's syndrome, is characterized especially by adiposity and failure of development of all the sexual organs, but without bone changes, or at least without bony enlargement.

Several theories have been advanced to explain acromegaly, but at the present time it is generally conceded that the hypophysis is the cause of the disturbance. The point at issue is as to whether it is a sub- or super-secretion. On account of the presence of a tumor in the hypophysis, Marie assumed that the disturbances of growth were due to lessened secretion. It has been determined, however, that only a certain type of tumor in the hypophysis is associated with acromegaly. Quite uniformly there is an enlargement of the anterior lobe due to adenomatous development with increase in the specific glandular secretory cells. Malignant or degenerative processes do not cause acromegaly. In some cases of the disease where there is no apparent enlargement of the anterior lobe, microscopic examination may still show an excess of specific secretory cells, or the possibility of hyperplasia of the pharyngeal hypophysis, as described by Haberland must be considered. The effect on growth of castration or pregnancy during which time the functioning activity of the ovary is in abeyance, supports the theory of supersecretion, as in both of these conditions the anterior lobe of the hypophysis undergoes hyperplasia. This phase of the subject will be taken up more in detail later. While it has not been definitely proved, the consensus of opinion at the present time is that acromegaly is due to supersecretion of the anterior lobe.

The other disturbance of development characterized by adiposity and sexual atrophy, and known as Fröhlich's syndrome, is especially associated with new growths at the base of the brain. An animated discussion is in progress as to whether the changes mentioned are due to disturbances of the hypophysis or merely phenomena arising from pressure action at the base of the brain. A review of the literature favors implication of the posterior lobe,

as in the majority of recorded cases there is evidence of lessened function of this lobe either by the direct invasion of new growths and degenerative processes, or by pressure from adjacent structures. As has been mentioned, sexual impotence and adiposity are infrequent in acromegaly and could be accounted for by pressure from the enlarged anterior lobe on the adjacent posterior lobe. Tumors in the vicinity could exert direct pressure, as has been suggested by Müller. Tumors of the cerebellum by causing an internal hydrocephalus can compress the hypophysis by forcing downward the floor of the third ventricle. It has also been shown, especially by Cushing and his colleagues, that removal of the posterior lobe in dogs is followed by genital atrophy and adiposity, the latter due according to Cushing, to resulting increased sugar tolerance.

In relation to the role of the hypophysis in modifying growth, recent studies in metabolism are of considerable interest. These investigations have been confined to acromegaly and to animals fed or injected with hypophysis. It is important in studies of this character that the animal receive the separate lobes rather than the entire hypophysis, but unfortunately in the past, the experiments have been carried out with the entire hypophysis, or at least statements are not made to the contrary. Most of this work has been done on animals for short periods of time. There are no recorded experiments where comparative studies have been made upon the effect in development of animals by prolonged feeding of the various anatomic components of the hypophysis.

It is the consensus of opinion that in acromegaly there is retention of phosphorus, calcium and magnesium, and often of nitrogen and chlorine. In some instances the retention of phosphorus and calcium is very decided. This is in accord with what we might expect from the over development in this condition.

Unfortunately we have very few feeding experiments where young animals have been given daily for a long period of time preparations of either the anterior or posterior lobe. It is not improbable that such feeding experiments might give very valuable information in regard to the effects on growth. The only experiments along this line that I have been able to find in the literature are those of Schafer. He fed to young rats for about three months dried anterior lobe, and to the controls the same amount of dried testes, and found that the former group gained considerably more in weight than the latter. We are at present conducting some feeding experiments with both the anterior and posterior lobe, which we hope may throw some further light on this subject.

Summarizing the effect of the hypophysis on growth, it may be said that supersecretion of the anterior lobe is probably responsible for the clinical picture known as acromegaly. Lessened secretion of the posterior lobe leads to adiposity and atrophy or failure of development of the sexual organs. On account of the early appearance of sexual impotence in acromegaly, it is possible that the anterior lobe may play a role in sexual activity, although this may well be explained by pressure in the posterior lobe, from the enlarged anterior lobe.

EFFECTS ON BLOOD PRESSURE OF EXTRACTS FROM THE HYPOPHYSIS.

One of the earliest discoveries in regard to the hypophysis was the effects of its extracts on blood pressure. Howell, Schafer and others demonstrated the presence of a pressor substance closely related to adrenalin. This may readily be extracted by macerating the gland with normal salt, and when injected intravenously produces a marked rise in blood pressure, more prolonged than adrenalin, due chiefly to its effects on the peripheral vessels. The heart is usually slowed, and in the majority of instances the amplitude of contraction is lessened, so that the action upon the heart is depressive in character; in this respect, it differs from adrenalin. Although extracts of the suprarenal gland, and the hypophysis both cause a rise in blood pressure, their method of action is quite different. Suprarenal extract acts upon the nerve endings in the vessels and may be inhibited by apocodein or ergotoxin; hypophysis extract effects the muscle directly, and is not inhibited by either of the above mentioned drugs. Both slow the heart, suprarenal extract through its action on the vagus, hypophysis extract by a direct depressing action. It is, furthermore, interesting to note, that while a subcutaneous injection of suprarenal extract will almost invariably relieve an attack of bronchial asthma, the hypophysis is without effect. The intensity of the peripheral constriction varies somewhat in different groups of vessels, those of the kidney undergoing dilatation, differing again in this respect from the suprarenal extract. As a result of this local dilatation in the kidney, extract of hypophysis has a marked diuretic effect especially when given intravenously. When administered by mouth, to man, its action is very uncertain and even intramuscularly, it shows an inconstant diuretic action. Schafer believes its diuretic action is independent of its effect on blood pressure, and due to the direct action of some substance on the renal epithelium. With our present knowledge of the method of action of diuretics, this seems very improbable. Polyuria, of hypophyseal origin, is in all probability due to hyperplasia or supersecretion of the *pars intermedia*.

On account of its direct action on unstriated muscle, extracts of the hypophysis should be especially useful in the treatment of uterine hemorrhage, and it has been used to induce labor. It has been generally taught that the pressor substance is only present in the posterior lobe. We (Lewis, Matthews, Miller) have been able to demonstrate conclusively that it is a secretion of the pars intermedia. As the anterior lobe adjacent to the cleft is histologically and embryologically pars intermedia, it should contain the pressor substance. We have shown that this is true by first removing the depressor substance present by extracting with alcohol. This pressor substance had been overlooked by previous investigators on account of the relatively small amount present in the anterior lobe.

There has been considerable speculation in regard to the manner in which the pressor substance reaches the general circulation. Herring advanced the theory that certain hyalin bodies originating in the pars intermedia and detected in the pars nervosa, represent this pressor substance on its way to the stalk through which it passes to the third ventricle. Cushing modified this theory by suggesting that these hyalin bodies originating in the pars intermedia were activated or acquired these pressor characteristics in the pars nervosa. Since we have been able to demonstrate that an active pressor substance is present in the pars intermedia, Cushing's modification becomes untenable. While hyalin bodies have been demonstrated wandering through the pars nervosa and stalk to the third ventricle, we have no conclusive evidence that they represent the pressor substance.

In addition to this pressor agent, all portions of the hypophysis contain a depressor substance. Some believe this is specific in character; others that it is the depressor substance normally found in all tissues. We have made an observation which requires confirmation, that a solution containing the depressor substance from the brain when heated in an autoclave no longer lowers blood pressure, while the same treatment did not destroy the depressor substance obtained from the hypophysis.

CORRELATION BETWEEN THE HYPOPHYSIS AND OTHER DUCTLESS GLANDS.

The correlation of organs is one of the most interesting and complicated problems confronting the physiologist at the present time. That peculiar influence protective in character, emanating from an organ, to modify the secretion of some distant gland, verges on the uncanny, and impresses us with the harmony of the organism. There is, no doubt, an inter-relation between the hypophysis and the reproductive organs. During pregnancy the anterior lobe of the hypophysis undergoes marked hyperplasia. A new type of cell is found in such abundance that a diagnosis of

pregnancy can be made from this alone. We might, therefore, infer that the hypophysis is in some manner concerned in the development of the foetus. These changes in the hypophysis are probably not due to the pregnancy per se, but to the arrested functioning of the ovary during this period. Furthermore, it is well known that the mother during pregnancy becomes generally plumper, the fingers, lips and nose thicken, and in many respects take on those changes characteristic of early acromegaly. Castration of either sex may produce somewhat similar changes in the hypophysis. In women deposits of fat and more especially changes in the facial expression follow early castration, and at autopsy hyperplasia of the anterior lobe can be demonstrated. Eunuchs show this same hyperplasia of the anterior lobe and many of these individuals have exceedingly long legs and arms, and frequently attain unusual height. Castrated children undergo unusual development when they reach puberty. It is also generally conceded that girls who reach puberty late average taller than those coming to this state early, the appearance of the sexual function stopping the hyperplasia of the hypophysis and thus interfering with the individual growth. Peoples of northern climes where puberty appears later are on an average taller than those of warm climates where puberty appears earlier. It is possible that the ungainly boy of fifteen or sixteen years, with his large feet and hands and rather heavy lower jaw, owes his rather unsightly condition to hyperplasia of the anterior lobe of the hypophysis.

HYPOPHYSIS AND THYROID.

Quite as definite a relation exists between the hypophysis and thyroid. The anterior lobe of the hypophysis undergoes marked hyperplasia after removal or degeneration of the thyroid. Removal of the thyroid in pregnant animals is followed by hyperplasia of the anterior lobe in the foetus. In hyperthyroidism the anterior lobe of the hypophysis is often atrophic, while in myxedema, the anterior lobe is hyperplastic. After removal of the hypophysis, the thyroid frequently undergoes hyperplasia.

HYPOPHYSIS AND SUPRARENAL.

The correlation between the hypophysis and suprarenal is almost as striking. After removal of the suprarenals it is reported that the anterior lobe of the hypophysis undergoes hypertrophy and not uncommonly in acromegaly the suprarenals are much enlarged; in one instance reported by Fischer, five times the normal size.

Summarizing briefly our present knowledge of the physiology of the hypophysis, it may be said that the hypophysis is essential to life. Acromegaly is associated with hyperplasia and prob-

ably supersecretion of the glandular elements in the anterior lobe. Obesity and failure of sexual development, known as Fröhlich's syndrome is apparently due to lessened function of the posterior lobe, whether pars intermedia or pars nervosa has not been determined. The pars intermedia secretes a presser substance which has also a diuretic action. Polyuria and glycosuria, often observed in acromegaly and after experimental disturbances of the hypophysis are due probably to supersecretion of the pars intermedia. There is a correlation between the hypophysis, thyroid, suprarenals, ovaries and testes.

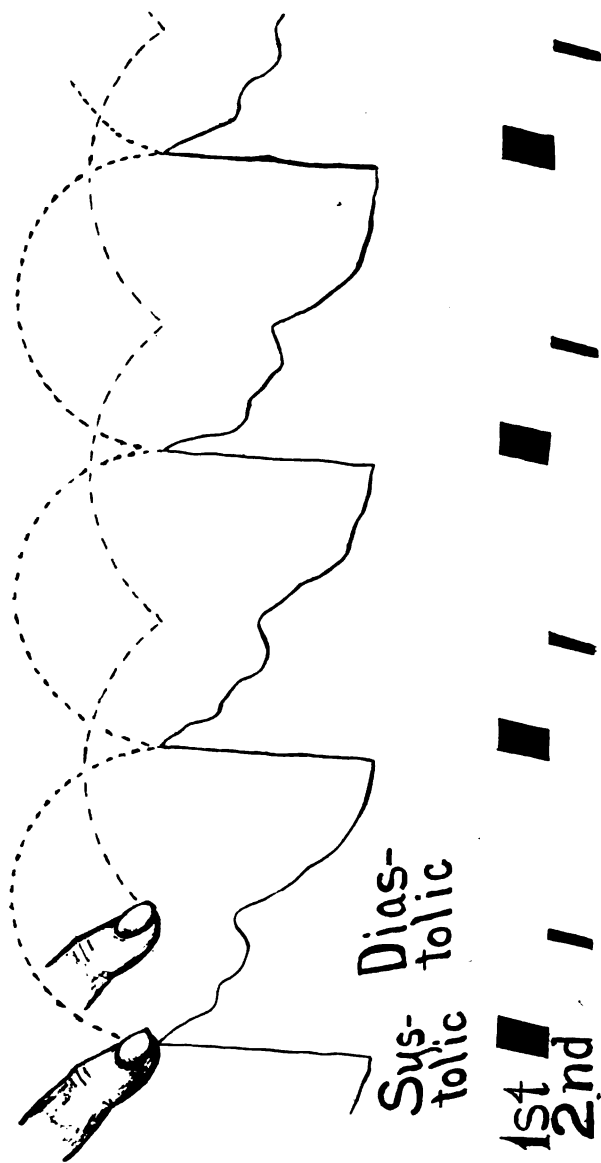
The Timing of Heart Murmurs.

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IN determining whether a heart murmur is systolic or diastolic in time we rely largely upon a comparison with the time of the pulsations felt in the radial artery or in the carotid. We can sometimes make a more immediate comparison with the cardiac apex impulse, but often that is not palpable, so chief reliance must be upon comparison with the arterial pulse. Ordinary palpation of the pulse is usually sufficient, but when the rate is rapid or the murmur is unusual there is uncertainty and the personal equation is great.

For some years the writer has employed with much satisfaction a modification of this aid which gives absolute certainty as to the time of a murmur in most cases. It consists simply in making intermittent pressure upon the radial artery to correspond in time with the murmur, i.e., the finger is brought down upon the radial synchronously with each occurrence of the murmur to be timed and lifted away during the interval between. If this intermittent pressure occurs with the systoles the finger feels the pulsation of the artery each time; but if with the diastoles the finger feels no pulsation whatever. With this method, therefore, if the finger pressing with the murmur feels the radial pulsations the murmur must be systolic, while if the finger feels no pulsation the murmur must be diastolic.

Familiarity with this method can be easily acquired by timing the normal heart sounds in the same way. A trial will at once demonstrate the fact that the finger pressing intermittently with the first sound will feel the radial pulse, while the finger pressing with the second sound will feel no pulse. A glance at the diagram will make the matter clear. Great irregularity of the heart may defeat any attempt at timing murmurs accurately, but slight irregularity will leave sufficient regular cycles to apply this method.



Three Years with the Army of the Potomac—A Personal Military History

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APRIL 27, 1863, 3 p. m. We are under orders to move at half an hour's notice, and all expect to be off before morning. We have now been in this camp over three months, and in the vicinity of Falmouth much longer; so it is desirable that a change should be made, even if we go but a short distance. The Fifth Corps is moving on our right today, and we received a call from Dr. Dean, who has been promoted to be surgeon of the 140th New York in that Corps. He is full of animation as usual, but only stayed with us a few minutes while his regiment was passing.

On the morning of the 28th, Tuesday, we marched at sunrise, and bivouacked for the night near Banks's ford. On the afternoon of the 29th we went forward to U. S. Ford, and bivouacked again in the rain and mud. A bridge was laid on the morning there during the greater part of the forenoon of May 1, and then of the 30th, and we crossed the Rappahannock the same afternoon, bivouacking near Chancellorsville late that night. We lay moved out beyond Chancellorsville about a mile on the road to Fredericksburg. The first division was acting in connection with the Fifth Corps at this time, and we reached the full view of the enemy's position, fully expecting to fight him. But about two o'clock p.m., we received an order directing us to withdraw and fall back on Chancellorsville. We did this reluctantly and slowly, finally forming near the Chancellor House in support of artillery. While I was sitting on my horse awaiting events, I had an opportunity to survey the position. The field was full of troops, artillery, ammunition wagons, and ambulances, and a few shells from the enemy, which we were expecting every moment, would have created a panic, I am sure. While thus waiting, the head of the Third Corps, with General Sickles and staff at its head, came up the U. S. Ford Road, and deployed on the right of Chancellorsville. Finally, we were given our position well out to the front about the center, and on one of the roads leading to Fredericksburg.

The First Division hospital was located in the woods about half a mile in rear of the Chancellor House, but we were not allowed to bring up our wagons, as nothing on wheels was permitted on this side of the river excepting artillery, ambulances, and ammunition wagons. So we had the men gather leaves, spread blankets upon them, and thus prepared beds for the wounded. Early Saturday morning I amputated a finger for a man who was wounded the night before, and soon the wounded began to arrive at our hospital. During the day Colonel Nelson A. Miles, 61st New York, was brought in wounded under the conduct of ambulance sergeant Joice, of the same regiment, and it was thought at first that his wound was mortal, as he was suffering from collapse from a bullet wound in the abdomen. He rallied, however, and the missile was cut out of his back near the spine, it having passed around between the muscular layers. He recovered promptly, and came back in time for Gettysburg. Saturday evening, just at dark, the 11th Corps gave way on our right, and their stragglers came through the woods, where our hospital was located, in such numbers as to nearly overrun us, and really endanger our wounded. The stampede was soon checked, however, though the woods were filled with stragglers most of the night. Sometime during the evening I saw Dr. Van Aernam, of the 154th New York, who told me his regiment was nearby. Near eleven o'clock P. M., I laid down on a blanket with A. B. Talcott, the Herald correspondent with the Second Corps, and while we were talking the artillery had a severe duel, the shells bursting above the tree-tops, and the explosions lighting up the heavens most brilliantly. This died away after midnight to an occasional gun, after which I obtained some sleep.

May 3. This Sunday morning we were up with the dawn, the fighting soon began and then the wounded poured in so we were busy, too much so to think about the ever shifting lines of battle, and to realize that a new line was being laid out which came very near our position. So the fighting went on during Sunday, to be renewed Monday morning, with disjointed and fitful intervals of quietude, only to be again broken by the sound of musketry and cannon, now in fearful proximity to our hospital. One of our wounded men had been re-wounded while lying on the ground, and one of the Ambulance Corps was killed while directing the unloading of an ambulance at the Hospital station. But all things must have an ending, and so with battles. On the afternoon of Monday, May 4, an ambulance train was loaded with wounded for shipment to Potomac Creek Hospital, which was located about half way between Falmouth and

Acquia Creek Landing, and I was ordered to take charge of it. We started about three o'clock P. M., crossed at U. S. Ford, and moved along the north bank of the Rappahannock until near Bank's Ford, then diverged to the left and struck across the country to Potomac Creek. It was near dark when we passed along the region of Bank's Ford, and we could plainly see the bursting of the shells where Sedgwick was having a struggle to cover the crossing of his Corps, the 6th, at this point. Finally, late at night I reached the Hospital and delivered the wounded, glad to get where I could have a night's sleep again, without fear of being awakened by the sound of guns and the noise of contending armies.

The next day, Tuesday, May 5, I was ordered on duty at the hospital, where I remained nearly three weeks, when I was relieved at my own request, as the wounded were all cared for as far as immediate operations were concerned. The surgical staff here is not adequate to do all the work, hence the Surgeon in charge was anxious to retain me. Our loss in the late battle has been heavy, and large numbers of the wounded have fallen into the hands of the enemy. I came near being hit myself several times, so near, indeed, that men on each side of me were killed and wounded. I am nearly worn out with fatigue and hunger, but shall soon recuperate here.

May 9. I have been busy daily since my arrival here, have made a number of operations, and shall amputate an arm the first thing tomorrow morning. Some estimate our loss at the Battle of Chancellorsville at 20,000 men, killed and wounded; but, at all events, we were ingloriously defeated—beaten in detail because our commander was not equal to the emergency.

May 13. Still at Potomac Creek Hospital and as busy as ever. We are now receiving the wounded that fell into the enemy's hands. They were delivered under flag of truce, and are glad enough to get with us. One man, whose wounds I dressed, gave me a Richmond paper of May 11, containing an account of the death of Stonewall Jackson, which I sent to my wife and it is still preserved with my papers.

May 15. Still busy with the wounded, and have three or four operations to make tomorrow morning. Until today the weather has been very hot, but a cooler wave has struck us which makes the wounded men more comfortable. As soon as the wounded are sent away I shall return to my regiment.

May 18. The weather is very hot, and it is very fatiguing to work over the wounded at such a time. Just at evening I rode over to the 6th Corps Hospital, where I saw Dr. Jenkins of the 49th, on duty. He says his regiment lost very few men

in the late battle. The 57th lost two killed, and twenty-nine wounded, besides a few missing. I visited the 136th regiment on Saturday, the 16th, where I saw Gad Parker and others who were all right.

May 20. The weather is still hot and I am suffering with the toothache, which adds very materially to my discomforts. The wounded are doing well for the most part, and I shall probably get away very soon. Dr. Rowland, of the 61st, New York, is associated with me here, and is a very competent medical officer.

Sunday, May 24. I am once more in camp with my regiment, and am very glad to get back again. I was relieved from duty with the hospital yesterday, and started for the 57th at once. All the operations had been made and I could not derive any benefit from a longer stay there, so I applied to be relieved. The weather is so hot I am not anxious to work any harder than is absolutely necessary, and here with the regiment I have very little to do, as we have but two men on the sick list.

May 26. The 57th is in very nearly the same place where I wintered, having returned to the old camp after the battle. It seemed like getting home again to the boys. I expect to go to Acquia Creek Landing today to make arrangements for ice for the hospitals of the Brigade, similar to the plan of last year at Harrison's Landing.

May 28. Very hot. Our Division has just been reviewed by General Hancock, who now commands the 2d Corps. Rumor has it that General Couch, after Chancellorsville, refused to serve longer under General Hooker, and was relieved at his own request. The 21st regiment has been mustered out of service on expiration of term, and is now home in Buffalo where it has been received with honor. It was a good regiment and deserves recognition at the hands of the citizens of Buffalo, for the service it has so honorably performed.

May 30. Everything is extremely dull in and about the Army these days, though day before yesterday, the 28th, we had orders to be ready to fall in at a moment's notice; but it created no excitement as everybody regarded it as a bit of a scare. It is rumored that Lee contemplates an attack upon our right, but I hardly think it probable that he will. The whole Army is very anxious for him to do so, for we think we could whip him handsomely if he would only attack us once. We have always been the attacking party, and that works to our disadvantage. I made a large number of operations after Chancellorsville, and they all did well with one exception. This case—a man belonging to the 88th New York, Irish Brigade—I amputated mid-

way between the ankle and knee joints. Eight days afterwards his nurse, in removing the dressings one morning, tore out all the ligatures causing alarming hemorrhage. This we arrested as soon as possible, but as he had two other wounds, the discharge from them together with the loss of blood proved too exhausting, and he died at the end of ten days. The leaves of absence for ten days that have been granted for the past few months have now been suspended, and officers can only get away at present on Surgeons' certificate of disability, or for five days in cases of great urgency. A great many officers are, as a consequence, obtaining sick leaves just now.

Monday, June 1. Yesterday Major Bell and I dined with Dr. Hewett, Surgeon of the 119th New York. The doctor is a friend of Major Bell's, and we went by special invitation at six o'clock P. M., at which hour, with several other guests, we sat down to the table. The menu consisted of oyster soup, claret punch, spring lamb and mint sauce, potatoes, green peas, asparagus, etc.; apple pie, ice cream, fruit and coffee. The company did not break up until near midnight, and Major Bell and I stayed all night at Dr. Hewett's. On our way home this morning we called at General Hooker's headquarters on some friends.

June 4. Yesterday I paid a visit to the 49th, and had a nice old-fashioned visit with Dr. Hall and others. General Howe gave a ball there last night, but I did not remain. Mrs. Colonel Lewis is visiting her husband in the Vermont Brigade. The Lewis's are from Buffalo.

June 6. The rebels are reported as having left their fortifications above Fredericksburg, and moving we know not whither. Heavy firing has been heard below the town this P. M., but it was chiefly to protect the Bridge Building. Two pontoons are across at Franklin's old crossing, and the Sixth Corps has thrown over a division, I presume to feel the enemy and see if he is still there in force. We are under orders to be ready to move at a moment's notice with three days' rations and sixty rounds of ammunition, which looks as though something was up. Bands are playing in all directions tonight, eleven-thirty o'clock, an ominous sign of a move.

June 8. We are still in the same old camp, but are constantly receiving orders indicative of a movement, and today all our sick were sent away—a pretty sure indication of activity. Yesterday I visited the left of the Army to see what the Sixth Corps was about, and found the "Old Division," the 2d, across the Rappahannock, the 49th on the extreme left of the line near the Bernard House, where our hospital was at the first battle of Fredericksburg in December last. The House itself is a par-

tial ruin from fire, though being of stone the walls yet stand intact. (See illustration in the "Century," August, 1886, Page 637.) I spent about an hour there, and had a pleasant visit with Major Ellis.

Recrossing the river at five o'clock P. M., I called at the Division Hospital where I found Dr. Hall in charge. His wife had arrived about an hour before, and he was very happy. I met Mrs. Colonel Lewis across the river, whither she had gone to pay her husband a visit. She was in good spirits and quite brave, having had an opportunity to see the Division in line of battle.

June 11. We have not moved yet, but are expecting orders at any minute. I visited the Sixth Corps again yesterday, where I saw Dr. Hall and wife, Colonel Bidwell, Major Ellis, and others. The 49th has been relieved from duty on the other side of the river, and is now encamped on the heights on this side. A great number of ladies are visiting the Sixth Corps now. Day before yesterday the Paymaster made his appearance, and I drew pay for the balance of January, and for February, March and April, sending \$300.00 home. No military commission was ever convened in my case, so I drew pay upon the ordinary vouchers, filing my muster-in roll as Surgeon as well.

THE GETTYSBURG CAMPAIGN.

June 13, 7.30 P. M. I am strongly of the opinion that we shall march before tomorrow at this time, but we are, of course, in ignorance of our destination. Just now the Quartermaster informs me that he has orders to take the Corps supply train to Stafford C. H. tonight, with the expectation that we follow early tomorrow morning.

June 17. Near Fairfax Station on the Orange & Alexandria R. R. we marched on Sunday, the 14th, and reached this place last night, coming via Dumfries. The First Division has had some slight skirmishing with the enemy, but no general engagement as yet. We are now about sixteen miles from Alexandria. The North must be in a state of excitement now, for the rebels are reported to have invaded Pennsylvania. I am glad they are there, for it will undoubtedly have a tendency to shorten the war.

June 18. We have moved two miles to Sangster's Station since yesterday, and are now about eighteen miles from Alexandria. The day has been very hot, but now, four o'clock P. M., there are signs of rain. Major Bell leaves tonight for Washington to enter the veteran Reserve Corps, and has been ordered to report for duty to Major Diven at Elmira.

June 19. It rained hard all night, and fortunately we did not move. The 49th is only about a mile from us, and Colonel

Bidwell gave me his photograph when I was there day before yesterday. Dr. Hall's wife has gone home, but Mrs. Lewis is still with her husband.

June 22. Near Gainesville. We camped at Centerville Friday night, and Saturday moved up here where we have been since. We are six miles from Thoroughfare Gap. Yesterday Pleasanton's Cavalry and a part of the Fifth Corps had a battle with Stuart the other side of the Bull Run Mountains, near White Plains where we lay last fall when McClellan was removed. The rumor is that Stuart was beaten. Last night General Stahl, with several thousand cavalry, passed along the road towards Warrenton. We are on the Warrenton Turnpike about twelve miles from Warrenton, in the most beautiful part of Virginia that I have yet seen. Our camp is located in a delightful meadow, and a cool breeze is rendering the air quite balmy. It looks, however, as though we should move today.

June 28. Near Frederick, Md. We left Gainesville Thursday noon, the 25th, crossed the Potomac at Edward's Ferry on the 26th, and reached Frederick at noon today. I don't know the distance from Gainesville here, but we have marched day and night since leaving there, with only short intervals of rest. General Hancock passed the column about seven o'clock this morning, and I rode with him a short distance, having a pleasant visit with himself and staff. It is said here this evening that General Hooker has been relieved from the command of the Army, and that General Meade, of the 5th Corps, has been appointed in his stead. We shall probably march early in the morning.

June 29. Last night at nine o'clock the 57th, with a section of artillery, was ordered to guard a bridge over the Monocacy River about two miles north of Frederick, and we remained out upon this duty all night. It seems there was a suspicion that the enemy might undertake to burn the bridge, but if any such idea ever pervaded his mind he made no attempt to carry it out while we were there. This, Monday, morning we were ordered to join the corps which was on the march towards Westminster: but owing to some delay in the transmission of the order we did not start until near nine o'clock, and consequently did not overtake the command until after midnight. I don't know just what time we did make junction with the remainder of our Division for, sometime during the night, being tired and hungry I reined into a lot, and sat down on a cock of hay with Captain Rose, our Commissary of Subsistence. Discovering a cow in the field near by, for it was moonlight, we got one of the soldiers to milk her and, after refreshing ourselves with hardtack and milk, we soon fell asleep. When I awoke it was daylight, my horse had straggled off a little way, and was grazing in a clover

field. I was alone, Captain Rose had gone, and I could see no troops anywhere; so I mounted my horse and rode on. I soon came across the regiment, and then stopped at a farm house where I got breakfast, and fed my horse some grain purchased of a farmer. At this house I wrote a letter home at five o'clock A. M., which I mailed at Union Bridge, Md., a small village near by, which was, however, called Uniontown in our orders. We remained all day, the 30th, resting near Uniontown, and were there mustered for pay in the afternoon.

(Continued.)

New and Non-Official Remedies.

(Begun in October, 1911, issue.)

QUININE ANALOGUES.

(Aristochin), Quinine carbonate. Slowly acted on by acids, hence less gastric disturbance. Same dose as quinine.

(Chinaphenin), Quinine and Phenitidin carbonate. Tasteless, water-insoluble, slowly dissolved in acids. Combines the actions of quinine and phenacetin. Same or slightly greater dose than quinine.

(Euquinine), Quinine and Ethyl carbonate. Practically same advantages and effects as aristochin.

Quinine lygosinate. Styptic and antiseptic, used in dusting powder, incorporated into gauze, in suppository &c.

Quinine and urea hydrochloride. Used as quinine substitute, especially hypodermatically; also as cocaine substitute, $\frac{1}{4}$ —1 per cent., injected into tissues; 10—20 per cent. topically.

(Salo-quinine), Quinine salicylate, tasteless, combining actions of quinine and salicylates. Salo-quinine salicylate, also tasteless, contains relatively more salicylic acid.

(Chinosol), normal Oxychinolin sulphate, is employed simply as an antiseptic, being feebly germicidal. Internally, 1-3 gram (5 grains) t.i.d.; externally 1:1000; in nose, vagina, bowel, etc. 1:5000; in eye 1:8000.

VOLATILE OIL ANALOGUES.

(Carbosant), Santalyl carbonate. Oily, almost free from taste and odor. Similar to oil of sandal wood, in action and dose.

(Santyl), Santalyl salicylate, similar to above, said to pass stomach unchanged and to be split into constituents in intestine, hence less irritating and more gradual in action than sandalwood oil, and with combination of salicylate effect.

Menthyl ethyl glycolate (Coryfin). Oily, very slight pepper-mint odor, used internally and externally as menthol or oil of pepper-mint.

Oil of pine needles (from *pinus pumilio*). Inhalation, antiseptic, expectorant, rubefacient.

Oleoresin of parsley seed, contains Apiol, a parsley camphor, emmenagogue, etc.

(Oxaphor) camphor hydroxid, 50 per cent. in alcohol. Like camphor, respiratory sedative with no depression of heart or secretions.

Sodium cinnamate is scarcely analogous to oil of cinnamon, as it is said to produce cicatrization about inflammatory, especially tuberculous, foci, rather than to have a direct antiseptic and carminative effect. Dose 1 milligram, increased gradually to 2 centigrams, intravenously, three times weekly.

ICHTHYOL ANALOGUES.

Ichthyol, Ammonium ichthyol, Ammonium sulpho-ichthyolate (exact composition and constitution in doubt) is claimed to be vaso-constrictor, antiseptic and "alterative." Internally and locally as in vaginal, rectal suppositories, urethral bougies, 2—20 centigrams (1—3—3 grains). As injection, 1—3 per cent.

Calcium ichthyol, Calcium sulpho-ichthyolate, brown, tasteless, water-insoluble powder.

(Ichthalbin), Albumin sulpho-ichthyolate, greyish white, tasteless powder, passing stomach unchanged, rendered soluble in intestine. Same dose as above.

(Ichthargan), Silver sulpho-ichthyolate, see under Silver.

(Ichthermol), Mercury sulpho-ichthyolate, see under Mercury. Ichthoform), Ichthyol formaldehyde.

(Ferrichthyol), Ferric sulpho-ichthyolate, see under Iron.

Lithium ichthyol, Lithium sulpho-ichthyolate.

Sodium ichthyol, Sodium sulpho-ichthyolate.

Tumenol (venale) a mixture of tumenol sulphone and tumenol sulphonic acid, a dark, oily substance, insoluble in water, combining with fats and used mainly in ointments, plasters, glycerin-water emulsions, 5—20 per cent.

(Tumenol-ammonium), Ammonium tumenol-sulphonate, water soluble, also combined as above, for which it is a purer substitute.

All of these products of fossil organic matter are of somewhat mixed composition, the chemic nomenclature is not established nor have the physiologic actions been thoroughly worked out.

SOCIETY PROCEEDINGS

Report of Committee on Public Health of the Medical Society of the County of Erie.

To the 90th annual meeting of the Medical Society of the County of Erie, 1911.

Mr. President—Your Committee on Public Health would respectfully report—The incidents of the year of particular value to those concerned in matters of preventive medicine have been varied, interesting, and important. To some of these we would invite your consideration. The report of the committee for 1910 called attention to our method of building houses for our public schools. That in some *seventeen* instances cited the specifications in regard to the ventilation of these buildings had not been complied with but on the contrary had been violated in each instance, in that there was no record of the tests of the actual performance of the ventilating apparatus as demanded by the *plain provisions of the contracts*, and also as imperatively demanded by the interests of the teachers and the children of our schools.

Your committee is pleased to be able to report that this matter has been given consideration by the heads of the several departments of our city government chiefly concerned, with the assurance that the evils mentioned will be corrected and in the future that the provisions of contracts will be followed with exactness. We think this is a step in progress in a matter of prime importance, and advise the society to continue its interests in the question of the ventilation of school buildings. The matter is not only one of singular importance, one concerning which there are conflicting opinions of men more or less well qualified to express opinions, but also a subject which is at this time receiving unusual attention of medical men in various parts of the world. As last year, so now we are of the decided opinion that there are many reasons why our teachers and children should have the advantage of the best ventilation to be procured and there are no sufficient reasons in any case, why they should not at least have as good ventilation as the several contracts plainly describe and for which payment has been made.

For many years America has been noted as the favorite soil for the growth of every possible variety of medical vagary. Eclecticism, Homeopathy, Quimby-Eddyism, Osteopathy, and Naturopathy are some of the many instances of such medical cults. Theoretically these systems of medicine are for the purpose of exploiting the alleged superiority of a given method of treatment of diseases, but practically they frequently furnish the material

for opposing some of the provisions of preventive medicine, as expressed in state laws or municipal health ordinances. *During the present year* these camp followers of the army of medicine lead by a member of our Board of Aldermen have made and are now pressing an attack upon the very foundation of state medicine, the elemental principle that the state has the right to protect its people by preventive measures from the ravages, the morbidity, and the mortality of the communicable, the preventable diseases as the same is expressed in the laws and in the practices of every civilized state in the world, by provisions for vaccination and revaccination to prevent small-pox.

Agitation of this antivaccination scheme had been in process of development in this vicinity for many years; it assumed definite proportions on June 20, 1911, when Alderman Fisher introduced a resolution repealing the provisions of the health ordinances regarding the vaccination of pupils of our public schools. Numerous hearings before the committee of Aldermen followed at which your committee were present and participated. These official hearings were supplemented by more arguments before various bodies of teachers, parents, mothers and business men. In order to be prepared for these occasions your committee by the advice of the Council procured a series of lantern slides illustrative of the subject—these slides are likely to become popular; their exhibition is instructive and commands attention.

Regarding this antivaccination campaign we have the distinct conviction that the enemy is well organized and generously financed; the leaders and speakers hate state medicine with a vicious hatred that makes civil and parliamentary speaking or debate well nigh impossible; to meet this attack requires a campaign of education and in the seats of the pupils to be taught will be found many members of the medical profession as that profession is broadly known to the State; in this campaign of education the county medical societies must take a prominent part. As a further step in this important matter, in the firm conviction that efficient vaccination and revaccination is a safe and reliable preventive of small-pox; also that investigation will establish here and now as has been universally observed in other times and other countries that the prevalence and severity of small-pox is in inverse proportion to the efficiency of vaccination and revaccination of the time and people, and also keeping clearly in mind the important fact that in a given people at a given time, the vaccination of that people can never be of higher efficiency than the general standard of competency of preparedness of the whole medical profession of the place and time, the following is submitted for your consideration:

Whereas, there were in America during the last reported decade, 297,288 cases of small-pox with 6,632 deaths and

Whereas, the morbidity and the mortality of small-pox in America are rapidly increasing and

Whereas, our country is the field of an active, aggressive and extensive propaganda of antivaccinationism and

Whereas, education in the principles and importance of preventive measures is the only means of preserving our people from the dangers of the aforesaid propaganda and the consequent presence and increase of small-pox, therefore

Resolved, That the Medical Society of the County of Erie hereby requests those in authority, City, State and Nation, to take suitable action to provide that hereafter in reporting cases or deaths from small-pox, mention and record shall be made of the facts and times and efficiency of vaccination and revaccination in every case.

Resolved, That copies of this appeal be sent under the seal of this society to the Health Commissioner of Buffalo, to the Health Commissioner of the State of New York, to the Medical Society of the State of New York and to the Public Health and Marine Hospital Service of the United States.

Buffalo for many years, in fact ever since our vital statistics have been systematically recorded has suffered from a scandalously high death rate from typhoid fever. In the sixties, and seventies, and eighties, when many of our people drank from wells, the rate was much higher than since the present water supply from the Niagara River. The present death rate from typhoid fever is more than *five times that of many of the large cities of Europe*, and sanitarians are quite in accord that this blighting death rate is due to the infection constantly found in our drinking water, the source of this infection being our *untreated sewage which we discharge into the Niagara River above any of our intakes*—our new intake at the Emerald channel being more exposed to such sewage than the older one farther down the river. A moments inspection of our sewer systems will make this plain. The sewers of Buffalo divide themselves into two systems: First, the sewers of Hertel Avenue, of Bird Avenue and of Swan Street, the sum of their diameters being 21 feet 6 inches, these by separate openings, discharge their sewage into the Niagara River below the intake of our present pumping station.

Second, the sewers discharging into the Buffalo River and its tributaries and these sewers have a diameter of 64 feet 9 inches. Should we estimate the volumes of sewage of these two systems by their several diameters, it would appear that those

infecting the Buffalo River and Harbor carry three times the amount of sewage as those which discharge their infection below our water supply intakes.

We are aware that plausible and popular arguments have been made and probably will be made again to show that the currents of our region in lake and river are such as to provide complete protection to both our old and new intakes.

Concerning such arguments we would observe, that we have listened to them for years, but have never been convinced that they show more than the fact, that at times the currents of the lake and the river are favorable to the protection of our intakes from the infection of our sewage. That this protection is present only when the currents of lake and river are determined by shore lines and gravity without the disturbing influence of winds. However, we should not forget that in this locality winds blow and sometimes, nay frequently rudely, boisterously, fiercely. That the prevailing direction of such winds are from the west, or, from the east; that such winds drive out the infected waters of our harbor through the openings of the breakwaters into the immediate vicinity of our intakes, new and old. That under the influence of such winds the water levels of our harbor rises or falls many feet in height—and further, that from the well-known habits of fluids under pressure when in a lake or harbor from the action of wind a superficial current of water is moving with the wind, there is always a deeper current moving in the opposite direction; and the direction, the velocity and the volume of the one, determines the direction, the velocity and the volume of the other. Thus it will be seen that high winds from the west, or, from the east are capable by superficial or deep currents of contaminating the neighborhood of our intakes, new and old, with the infected waters of our sewage laden Buffalo River and Harbor. That such infection does in fact frequently take place is amply demonstrated by the bacterial findings of our water examinations, by the frequent warnings from our Health office to boil the water—and from our persistent high death rate from typhoid fever.

In the mention of our sewer system we observed that a number of our newer and larger sewers discharged their untreated sewage into the Niagara River below our old intake—this fact is of enormous significance to the neighboring cities, Niagara Falls, Lockport and the Tonawandas. We have had the honesty and the courage to characterize the death rate from typhoid fever of Buffalo as scandalously high; we are ashamed to be obliged to admit that the same for the cities just mentioned is much higher, and the prime cause of the disease is the untreated sew-

age of Buffalo. The intelligent sanitary consideration of this question will only come when the cities of the Niagara frontier are conceived as one people, one in interest, one in health problems, one in sewage disposal, one in water supply. Buffalo is poisoning her own people, and year by year is giving them more than five times as much typhoid fever as have the cities of Berlin, Hamburg and Munich. Buffalo sewage is fouling the water supply of the Tonawandas with the result that our unfortunate dwellers in those cities have more than ten times the typhoid fever as the foreign cities before mentioned, and in a like manner by the same means Buffalo is infecting the water supply of Niagara Falls, and in consequence the unfortunate inhabitants of that world famed city of resort have more than thirty times the typhoid fever of those cities of Europe, and yet we of America are wont to boast that we are a practical people, an intelligent people and that we believe and know that in disease, prevention is better and cheaper than cure.

The indifference, the apathy, the ignorance of Americans as to problems of public health is appalling in degree, and most discouraging and disheartening in effect. A dam at Johnstown or Austin breaks as such incompetently constructed structures are wont to break, and for a few days we seem to appreciate the importance of competent advice in such buildings. The roof of a pump house falls as roofs so built are liable to fall, and in falling kills eight of our people, and for a short time we seem to be aroused to some intelligent appreciation of the importance of the work of the builder. And yet Buffalo in 1910, lost by death from the more common preventable diseases more than 143 times as many citizens as were killed when the pump house roof fell, and to this enormous unnecessary killing the usual experience of the years, we are apparently indifferent.

Verily, government of the people, for the people, by the people has not yet achieved perfection. Verily, the work of medical men and of medical societies in educating the American people to a right evaluation of the practical principles of preventive medicine is not a light and trifling task but is a task demanding constant and continuous efforts without cessation or discouragement, even when results are seemingly disappointing. We must fight it out on this line if it takes all summer. Some of our folks occasionally complain of the slow growth of our city. Possibly we may more of us one day appreciate the fact, that a low sick and death rate makes for the financial and commercial prosperity and growth of a city. Possibly we may one day come to see that when we would show to all that "Buffalo means business," we will so care for our sewage, or filter our

city water, that it will be no longer necessary to save our citizens from the impending danger of the preventable sickness and death by typhoid fever, by the oft repeated admonition "Boil the Water."

In conclusion we would report with sincere pleasure the considerate courtesy we have received from the heads of the several departments concerned in our work. Our official duty compelled the severe criticism of methods and results, but such criticism has never in correspondence or in interviews provoked anything but patient kindness and courtesy.

We would also mention the literature consulted in the preparation of this report—"The Reports of the Department of Public Works of Buffalo, N. Y., 1906 to 1910," "Reports of the President's Homes Commission," "Small Pox in the United States, by John W. Trask, Assistant Surgeon General United States Public Health and Marine Hospital Service." "Sewage Pollution of Interstate and International Waters, by Allan J. McLaughlin, Hygienic Laboratory Bulletin No. 77." To these official publications we are greatly indebted, and the obligation we gratefully acknowledge. Respectfully submitted

EDWARD CLARK,
P. W. VAN PEYMA,
HENRY REED HOPKINS,

Chairman.

Committee on Public Health of the Medical Society of the County of Erie, December 18, 1911.

433 FRANKLIN STREET.

THE Medical Society of the County of Cattaraugus, met January 2, at Salamanca, devoting special attention to the matter of vaccination. Officers were elected as follows: President, H. W. Livermore, Gowanda; Vice-President, Benjamin Van Campen of Olean; Secretary-Treasurer, Herman W. Johnson, Gowanda.

THE Elmira Academy of Medicine, on January 3, enjoyed a paper on Deafness by Dr. G. M. Case and one on Uterine Cancer by Dr. A. H. Baker.

THE Buffalo Academy of Medicine announces the following programs for February. The meetings are held at 8.30 in the Public Library Building and visiting physicians are welcome.

February 6. Surgical Aspects of Certain Organs of Internal Secretion, Dr. George W. Crile of Cleveland; February 13, (subject to be announced) Dr. Irving M. Snow; February 20, Uterine Displacements, Dr. Charles W. Banta; Prevention of Malpositions of the Uterus and Allied Disorders, Dr. John V. Woodruff;

February 27, (subject to be announced) Dr. Wm. H. Welch, Baltimore.

THE annual meeting of the Oneida County Medical Society was held at Utica, January 9, 1912, Dr. Fayette H. Peck presiding. The scientific program was as follows:

"Immediate repair of soft parts after labor," Dr. Angeline Martine; "Puerperal eclampsia," Dr. W. J. Schuyler; "Indications for Forceps," Dr. F. D. Crim; "Preparation and Care of Patients in an Ordinary Accouchement," Dr. M. J. Davies; "Relations of Pregnancy to Certain Abdominal Diseases," Dr. A. L. Benedict, Buffalo.

Officers elected: President, Dr. T. H. Farrell; Vice-President, C. R. Hart; Secretary, W. B. Roemer; Treasurer, T. Wood Clark; Librarian, Smith Baker; Censors, F. J. Douglass, H. G. Jones, Charles Bernstein, E. D. Fuller, F. D. Crim; Delegates to State Society, F. H. Peck; alternates, Charles H. Baldwin, D. M. Allison, H. G. Jones; Delegates to 5th District Branch, T. Z. Jones, T. Wood Clark; alternates, G. J. Ballard, Kent E. Williams.

THE Medical Union of Buffalo gave a banquet to nearly a hundred members and guests, at the Hotel Statler, January 24, 1912, in honor of Major Frederick F. Russell, M. D., U. S. A. The President, Dr. George F. Cott, called upon Major Wm. G. Bissell to introduce the guest of the evening, and the latter read a scholarly paper on the use of Typhoid Vaccine, which was briefly discussed by Drs. H. C. Buswell and James E. King. Many of those present expressed the wish that we might publish the paper in full and we would gladly have done so but, as the material was based on official records, Major Russell did not feel at liberty to publish it at present. We may, however, state that, largely due to the work of our own army medical staff, typhoid vaccine has been made much more efficient and freer from danger than during the Boer war; that it has been employed in about one hundred thousand Americans, under the direction of the U. S. A. surgeons without any serious and with few unpleasant immediate results; that immunization for about two and a half years is apparently produced by the use of three doses in about three weeks; that the incidence in vaccinated cases, apparently subjected to risk of infection, is much less than for the unprotected. Major Russell also made a point which few realize: that army manoeuvres may be shams so far as the strictly military features are concerned but that, for the medical staff, they lack only traumatic and emergency features to afford real experience.

THE Elmira Academy of Medicine will meet, February 7, 1912, at the Federation Building. Dr. John C. Fisher will present a paper on Neurasthenia. Non-members are invited.

THE Medical Society of the County of Allegany met at the Kinney House, Cuba, January 11, 1912. Papers were read by Dr. N. H. Fuller of Friendship on Scarlet Fever and by Dr. F. E. Brundage of Belmont, on Children.

THE annual meeting of the Rochester Academy of Medicine was held at Hotel Seneca, January 17th, 32 fellows being present.

The proposed amendment to the By-Laws, "That each section shall meet once in four months or oftener if it is so desired, except during the months of June, July, August and September, which shall be deemed vacation months," was adopted.

A proposed amendment to limit the membership of the Academy, was tabled indefinitely.

Officers were elected as follows:

President, Charles E. Darrow, M. D.; Vice-presidents, in charge of the work of the four sections, Cornelia White-Thomas, M. D., Charles E. Van Der Beek, M. D., William W. Percy, M. D., Leonard W. Jones, M. D.; Treasurer, Wesley T. Mulligan, M. D.; Secretary, Edward L. Hanes, M.D., appointed by the Council to fill the unexpired term of William M. Brown, M. D., resigned. Trustees, Loren W. Howk, M. D., Richard M. Moore, M. D., and Thomas A. O'Hare, M. D.; Councillors, William B. Jones, M. D., and Charles D. Young, M. D.; Member of Library Committee, John O. Roe, M. D.

The retiring President, Dr. Richard M. Moore, presented his address in the form of a most interesting and suggestive paper on the question of keeping tuberculous patients at home under the care of the family physician.

Following the adjournment the newly elected President, Dr. Charles E. Darrow, appointed a new committee to take up the much discussed question of a home for the Academy:

DR. EDWARD B. ANGELL, Chairman,
DR. EDWARD MULLIGAN,
DR. WILLIS E. BOWEN.

The names of eight candidates for election to fellowship were presented.

ABSTRACTS

REICHER, quoted from *Therapeutic Gazette*, October 15, 1911, recommends 1—1½ c.c. of 1:1000 adrenalin solution containing ½ per cent. novacaine, injected every two or three days into can-

cer. He claims good results from the shriveling of the mass. Naturally, at present such treatment should be limited to inoperable cases and may we suggest watching the effects on blood pressure, especially in the elderly among whom most cancers occur. The joint use of nitrites should counteract any danger of excessive blood pressure. As to remote effects on blood vessels, the pancreas, etc., the local indication justifies almost any risk.

RADIO-ACTIVITY OF MINERAL WATERS. G. A. Persson (sic) of Mt. Clemens, *Lancet-Clinic*, October 14, 1911, states that radio-activity has been demonstrated in the Carlsbad, Pöstyen, Arkansas Hot Springs, Yellow Stone Park and other waters. (We believe, also in the waters of Bath, England, which has been a resort since the Roman occupancy, at least, and where, indeed, one can still see the very much restored Roman bath house.) Persson reproduces radiographs to show a high degree of radio-activity in the waters of Mt. Clemens.

In the Carlsbad waters, radio-activity has been found to be higher in the cooler springs, and has even been demonstrated in the gases. Much of the scepticism regarding the beneficial effects of sojourns at springs has been dissipated by the demonstration of radium and its congeners and it is altogether likely that actinic emanations explain the superior results of visits to springs, as compared with the home use of stale water, supplanting the former explanation of the benefits of rest, change, and suggestion. This explanation, is, however, a double-bladed sword for it is perfectly possible that radio-therapy may be obtained at home nor must we forget that any therapeutic agent requires careful dosage and study of contraindications.

SANITARY PRIVIES. The September 1911 issue of the *Bulletin of the Illinois State Board of Health* is largely devoted to the safe disposal of human excrement. The Lumsden, Roberts and Stiles privy is adopted as the most practical solution of the problem for farms and other places where there is no sewerage system. This consists of an ordinary back house, the vault of which is replaced by a water-tight oil barrel or similar receptacle. Near the top of this, a T pipe is fitted, both ends of the T being covered with wire gauze and the long pipe discharging the excess of liquid into a covered kettle or similar receptacle. Full specifications are provided so that, except for the T pipe and the two receptacles, the construction is within the skill of any amateur carpenter.

Farmer's Bulletin No. 459 by L. O. Howard of the U. S. Department of Agriculture is included with the above. This discusses the House Fly. This sort of popular education in sanitation ought to produce results.

A FURTHER PROTEST AGAINST THE ROUTINE USE OF PURGATIVES. Edwin Walker of Evansville, Ind. (*Am. Jour. Obst.* November, 1911), renews his advice against the promiscuous use of laxative remedies. The popular faith in these drugs is akin to a superstition, and for this the physician is largely responsible. In the past seven years he has not purged 1 per cent. of his operative cases. His patients have done better, they have had fewer complications, and have been more comfortable. More than 90 per cent. of his cases have been addicted to the purgative habit. Ninety-five per cent. of these were relieved of their constipation under a suitable diet combined with regular habits. The routine practice of using a purge before every operation is bad. The bowel contents are rendered more fluid and germ activity is increased.

DISEASES OF THE THYROID IN THE FEMALE.—Miles F. Porter of Fort Wayne, Ind. (*Am. Jour. Obstet.* November 1911), is convinced that the thyroid gland deserves more consideration at the hands of gynaecologists and obstetricians than it has received. There is much clinical evidence in support of the theory that what may be termed a physiologic superactivity of the thyroid is a valuable safeguard against puerperal toxæmias and infections. He reports six cases which show the need of attention to the thyroid in disturbance of the sexual organs of women. His observation leads him to believe that those pale, poorly nourished, nervous young women who complain of some menstrual disorder or pelvic discomfort are more often the subjects of thyroid than of genital disease.

EARLY DIAGNOSIS OF ECTOPIC PREGNANCY.—R. R. Huggins of Pittsburg (*Am. Jour. Obstet.* November, 1911), believes that the diagnosis of ectopic pregnancy should be made previous to the final rupture and collapse in at least 80 per cent. of the cases. The patient's history for a number of years previous to the development of symptoms should receive careful study. In a great majority of cases there has been a tubal infection of which a period of sterility is strong evidence. The menstrual history is very important. When a woman who has been regular goes beyond her time she will suspect pregnancy. If a flow from the vagina begins in a period varying from four or five days to three weeks after the regular time, continuing more or less regularly, accompanied by pains periodic in character located in the hypogastrium or on either side, extrauterine pregnancy should be suspected at once. In 95 per cent. of the cases of extopic pregnancy seen by the writer, the history and local symptoms have overshadowed all others, and seldom in the early weeks have the usual general signs been present. He shows how to differentiate between this condition and abortion, or salpingitis, or other condition which might

be mistaken for it. He submits the histories of fourteen cases where the diagnosis was made and operation performed previous to the time of rupture.

REMARKS ON HIGH BLOOD PRESSURE AND ARTERIOSCLEROSIS.—J. M. Jackson of Boston (*Bost. Med. & Surg. Journ.*, November 2, 1911), calls attention to the importance of routine measurement of blood pressure in persons entering upon or early in middle age. In these cases increased pressure is often the only sign of a chronic poisoning arising from deficiency of elimination, either intestinal or urinary. The increase need not be great to injure any ordinary heart in time. The intestinal tract is frequently responsible for the toxins either through frank constipation or slow and deficient elimination. He cites the case of a woman who had been under treatment for "neurasthenia" for ten years. She had been subject to frequent attacks of severe headache and profuse nosebleeds. The blood pressure was 230 during an attack. Although there had been a daily bowel movement, investigation showed that the source of the trouble was in the intestinal tract. Under appropriate treatment, the pressure was reduced and perfect health resulted.

Overwork is another potent cause of high tension and its sequel arteriosclerosis. It is found particularly among brain workers who are kept at a high pitch. There is also undoubtedly a hereditary tendency to high arterial tension. The symptoms of the condition may simulate almost any disease, but those that are often attributed to neurasthenia are especially mentioned. The changes in the retinal vessels are frequently the first indication of the increased pressure, so that the ophthalmologist is often the discoverer of the condition.

BACILLUS COLI INFECTIONS OF THE URINARY TRACT: Reginald M. Rawls, of New York, *Medical Record*, October 7, 1911. In a certain percentage of adults, even in health, the bacillus coli is taken up by the lymphatics and blood vessels of the intestines and deposited by the blood current in the kidneys. The number and virulence of these microorganisms depend on the intestinal disturbance and the particular strain present.

The greatest predisposing cause of bacillus coli infection of the urinary tract is anything that interferes with a free secretion of urine or causes any back pressure in the urinary tract.

The earliest symptoms of bacillus coli infection of the urinary tract are apt to be mistaken for those of a mild cystitis, whereas the real site of infection is most often higher up in the urinary tract and of more serious pathologic import.

With greater care in diagnosis we will find that bacillus coli infections of the urinary tract are likely to be mistaken for other acute conditions, such as appendicitis, malaria, intestinal indigestion, toxemia of pregnancy, ether nephritis and acute and chronic nephritis. This is especially true of post-operative gynecological cases.

SALVARSAN IN SYPHILIS: G. Frank Lydston of Chicago, *New York Med. Jour.* October 21, 1911. Lydston claims that it is unnecessary to use a very dilute solution of salvarsan for intravenous injection. The solution is made in 5—10 c.c. of salt solution alkalized and injected very slowly into the vein with a Luer syringe. The rapid flow of blood in the vein diluting the solution sufficiently provided that the injection be made very slowly.

SILVER AND X-RAYS IN DISEASES OF THE ALIMENTARY TRACT (F. Hernaman-Johnson: *British Med. Jour.*, October 14, 1911).—Acting upon the suggestion made last year by Sir J. J. Thomson as to the use of secondary rays in therapeutics (see *PRESCRIBER*, 1910, p. 184), the author concluded that if silver, in a suitable form, could be introduced into the alimentary tract and made to cover an area of ulceration, the result of exciting the metal by hard x-rays projected through the back of the ulcer would be a bombardment of the diseased surface similar in effect to that from a highly active radium salt. He employs chemically pure precipitated silver, which is a dark, amorphous, tasteless powder, giving 8 grains of this mixed intimately with a meal of milk and bread-crumbs. Seven hours later an exposure was made (full details of technic are given), and this procedure was repeated three times a week for several weeks. The method has been applied with considerable success to cases of duodenal and gastric ulcer and to a case of pyloric obstruction with tumour. The author suggests, in place of administering silver by the mouth, the injection (per rectum or subcutaneously) of an emulsion of precipitated silver in olive oil.

(Note. We have used the high frequency current with the hope of driving silver from solutions of pretargol, etc., into rectal ulcer and cancer—apparently with good results though the time is not ripe for a definite report. A. L. B.)

COLEY'S MIXED TOXINS OF ERYSIPELAS AND BACILLUS PRODIGIOSUS, Wm. B. Coley of New York, *Surg. Gyn. and Obs.*, August 1911, sums up his experience as follows:

"Up to the present time I have had sixty-five cases of inoperable sarcoma in which the tumors disappeared under the use of the mixed toxins of erysipelas and bacillus prodigiosus. The

utmost efforts have been made to trace the after histories of these cases with the following results:

Seven remained alive and well at the end of 15 to 18 years.

Seven remained alive and well at the end of 10 to 15 years.

Seventeen remained alive and well at the end of 5 to 10 years.

Ten remained alive and well at the end of 3 to 5 years.

That is, 41 cases remained well from 3 to 18 years; or 31 from 5 to 17 years."

A FIRST STUDY OF INHERITANCE OF EPILEPSY, Charles B. Davenport and David F. Weeks, M.D., *Journal of Nervous and Mental Disease*, November, 1911.

This is an analysis of the data obtained in 177 pedigrees of the patients at the New Jersey Village for Epileptics at Skillman, N. J. The pedigrees were obtained by field-workers who visited the homes of the relatives and in that way were able to obtain data which would be otherwise impossible, as it is well known how difficult it is to obtain data on blank forms sent out by an institution.

These two experienced workers in Eugenics and in Epilepsy have employed the Mendelian method in analyzing the material obtained by their field-workers. This method assumes that the inheritance of any character is not from the parents, grandparents, etc., but from the germ-plasm out of which every fraternity and its parents and other relatives have risen, and accordingly, when a unit character, upon which normal development depends, is absent from the germ-plasm that character cannot be transmitted to the offspring.

The genealogic charts and tables accompanying the article show in a most instructive manner the preponderance of epilepsy, feeble-mindedness, etc., in these families. In one instance there were 35 F x F (feeble-minded with feeble-minded) matings, which yielded 142 known offsprings—all feeble-minded.

As a result of these analyses the authors conclude that when both parents are epileptic, both feeble-minded, or one epileptic and the other feeble-minded all the offspring will be either epileptic or feeble-minded, and the proportion of epileptics in any fraternity increases with that in the parentage.

When epilepsy occurs in the progeny out of matings between "tainted" and "normal" persons they conclude that the normal parents must belong to defective strains, as it would seem to be rare that a person of mentally strong strain, even if mated to a "tainted" person, should have an epileptic child. The normal parent of an epileptic usually has some defective germ cells.

The writers advance the hypothesis that, apart possibly from traumatic causes, epilepsy rarely, if ever, arises from strains devoid of defective germ plasm.

From a sociological standpoint the data given in this paper are of great value, and as the evidence accumulates that the reproduction of these defective classes should be limited it may open the way to legislative enactments restricting the marriage of such individuals.

The authors of the paper state, that, "If our data should hold generally for strains with epileptic members we could conclude that, if no change in mating and fecundity occur, the number of epileptics and feeble-minded in the state of New Jersey will be relatively double what it is now in 1940, and relatively four times as common in 1970. Thus if the present proportion is 1 to 500 it would be 1 to 125 in 1970."

As measures to stop this increase they recommend as the most effective, and violating least the social ideals of our time, the segregation during the entire reproductive period (say from 15 to 45 years of age) of epileptics of both sexes.

GOTTHEIL in a review of the progress of Syphilography (*Progressive Medicine*, Vol. XIII, No. 3) deplors the excessive advertising which 606 has received in the lay press. In summing up his experience with the drug he states: "Its immediate effects may be better, in some cases, than that of mercury; in others, it is slower and less certain; in some cases, it fails entirely. It cannot, therefore, replace the mercury-iodine treatment, but should be used in conjunction with it in suitable cases."

In regard to the Wassermann reaction. "While a positive reaction means an infection with syphilis in 99 per cent. of the cases, it cannot be regarded as conclusive without knowing the character of the work done by the serologist. The test is so delicate, and its technic must be so rigorously carried out that one examination should not be relied upon in doubtful cases."

"The test can never supplant competent and exhaustive clinical observation, but can aid it greatly."

Reports of the Wassermann reaction in congenital idiots are positive in 9—14.7 per cent. With this fact before him he advocates that the reaction be tested in every pregnancy and if positive that the mother receive appropriate treatment. Mercurial treatment should also be administered to the mother if there is a specific history regardless of the reaction.

ACTIVE IMMUNIZATION IN TUBERCULOSIS, Dr. H. S. Achard of Chicago, *Illinois Medical Journal*, August 1911. Passive im-

munization (i.e. by injection of sera obtained from animals infected with virulent bacilli, as by Marmorek's and Maragliano's methods) has failed. Active immunization (by direct injection of germ products into the patient) has yielded good results. He cites the following statistics:

Authority	General Treatment			Active Immunization		
	No. of cases	per ct. cured	per ct. relieved	No. of cases	per ct. cured	per ct. relieved
Langenbach & Weil	99	9	45	99	42	40
Pottenger (collected from literature, first stage) cases)	611	64		496	84	
von Ruck at Winyah	782	11.9	30.5			
von Ruck at Winyah tuberculin				723	36.8	42.8
Watery Ext. of T. B.				1503	55.5	33.8
Collected from literature, watery ext. of T. B.				2183	50.3	29.4

Von Ruck also found that 90 per cent. of cases apparently cured by general treatment, relapsed and only 20 per cent. of those apparently cured by active immunization. Achard also discusses technic quite thoroughly.

TOPICS OF PUBLIC INTEREST

DR. RUPERT BLUE of the United States Public Health and Marine Hospital Service, having been promoted by the President, assumed charge as Surgeon-General, January 12, 1912. While, in a sense, the failure of the scheme to place an outsider in charge of the service may be attributed to numerous protests of professional bodies, we believe that the President's conception of honor and of the fitness of things, would have sufficed. It is now the duty of the profession to get after the medical politicians who concocted this scheme and to deal with them in such a thoroughly disagreeable way that there will be no danger of a repetition of the experiment. Candidates for the three government medical services are subjected to an examination which weeds out from 75 to 90 per cent. of those applying, and which deters the vast majority from applying at all. The appointees are held to a rigid discipline, are promoted only on examination as to intellectual, executive and physical fitness, are paid only moderately, in proportion to the demands made upon them. One of the implicit compensations of the service, is the chance of rising to the generalship. To take this chance from tried men who have grown up in the service, would be dishonorable.

Examination of Dentists for the U. S. Army.

EXAMINATIONS for the appointment of Acting Dental Surgeons will be held at Fort Slocum, New York; Columbus Barracks, Ohio; Jefferson Barracks, Missouri; Fort Logan, Colorado; and Fort McDowell, California, on Monday, April 1, 1912. Blanks and information can be procured by addressing the "Surgeon General, U. S. Army, Washington, D. C." Blanks must be returned at least two weeks before the examination.

After three years' service at \$150.00 per month if found qualified, appointees are promoted to the grade of dental surgeon with the rank of first lieutenant.

THE Lockport Academy of Medicine has adopted an advanced schedule of rates: \$2.00 for day calls, \$3.00 for night calls, \$15.00 for what the newspapers very modestly term family cases. Much popular dissatisfaction is expressed at the increase. This is natural enough. The ultimate unit of value is the day's labor. Raise of wages is of no avail unless prices remain as before. If a man has accumulated the equivalent of a million day's wages and the wage, expressed in dollars is doubled, half of the capitalists' accumulation has been confiscated. When the accumulated wealth is large enough, such confiscation means no perceptible decrease in comfort of life. Hence the tendency is to confiscate from the small business and professional man, in the interests of the laboring man.

UNITED STATES CIVIL SERVICE EXAMINATIONS.—A great variety of positions, clerical, mechanical and professional, in widely different services, at home and in our possessions, are to be filled. The following appeal most directly to our readers: Physician and Matron, Indian Service, Veterinarian Philippine Service, March 13. Pharmacist, P. H. & M. H. Service, Scientific Assistant, Department of Agriculture, Trained Nurse, Indian Service, April 10.

We would advise anyone who can do anything reasonably well and who desires government employment, to inquire of the United States Civil Service Commission, Washington, promptly.

THE Young Women's Christian Association of Buffalo is undertaking a campaign to raise \$50,000 for the improvement of the main building, the lease of quarters for transients near the depot, and the purchase of a summer home on the lake shore. These are worthy reasons, offered by a philanthropy of tried and proved worth. The second object seems to us especially

important, in view of the gross injustice, sometimes ruin, done to strange girls by ostensibly kind-hearted acquaintances.

THE American Academy of Medicine, a national organization of college educated physicians, devoted to educational and sociologic matters, announces a conference on Conservation of School Children, at S. Bethlehem, Pa., Wednesday and Thursday, April 3 and 4, 1912. The profession is invited to attend and, so far as eligible, to become members. Lehigh University will afford meeting places and extend its hospitality in various ways. Children are almost as deserving of conservation as streams and trees and we trust that the profession will cooperate heartily.

THE New York State Civil Service Commission (address at Albany for particulars and application blanks), will hold an examination for candidates for junior physicianships in the State Hospitals for the Insane, February 24. The position is open to both Regulars and Homoeopaths, and is not limited to residents of the state. The salary is \$900 and maintenance, increased annually by \$100. till the limit of \$1200 is reached, after which there is a chance for promotion.

MRS E. H. HARRIMAN will defray the expense of an investigation as to Public Health, Hospitals and Budget, under a committee of the New York Academy of Medicine.

TONAWANDA's typhoid incidence for 1911 was almost double that of 1910. Dr. W. A. Scott, Surgeon of Co. E, 3d Reg. N. G. N. Y., will inoculate as many of the men as desire it.

OUR CONTEMPORARIES

THE *Zentralblatt für Chirurgie*, No. 35 of 1911, abstracts Dr. Edgar McGuire's article on Cerebral Compression, from the BUFFALO MEDICAL JOURNAL of July 1911. If any of our readers have the idea that western New York is not capable of supporting a medical journal that is worthy of respect, aside from its function as a medium of local news, let them remember that this is the sixth article (inclusive of three editorials reprinted in toto) which has been considered worth reproducing in more than passing mention, by our exchanges, in as many months. And it is perfectly possible that many other abstracts have been made which have not come to our attention.

THE *American Journal of Surgery*, January 1912, has a special "western issue," containing 16 splendid articles by as many splendid men. We cannot even list them, much less abstract the articles, but would advise all interested in surgery and borderline studies to get a copy and read it. Just to be contrary, we have averaged, approximately, the longitude of the places where these men live and find it to be 90 degrees, ranging from Cleveland to Bellington, Washington. But "western" is a relative term.

The same Journal has an article on the *Journal of the A.M.A.* which will interest all "stormy petrels" in the profession. We have no time to engage in the quarrel. The sharpest critic is often the best friend and it will not hurt the great national organ to show that it is adhering to a higher standard of ethics now than formerly, or that there is still room for improvement. In all kindness, we may say that the facts presented lead to a more charitable and lenient attitude on the part of the latter, toward independent journals which, in the struggle for existence cannot always follow the course that they would prefer. Then, too, many feel that a "judicial attitude" means giving the man with whom we differ a fair chance to present his own claims, and not a condemnation or a refusal of a hearing.

DR. GEORGE B. SHATTUCK who, for 31 years, has conducted the *Boston Medical and Surgical Journal*, has retired. We record the fact with mingled congratulations for his past work, regret at his leaving the field of active journalistic work, and best wishes for the future both of himself and of the Journal. The motto of the *Albany Medical Annals*, "Going out, they hand their lights to others" (or Greek words somewhat to that effect), is most appropriate on such an occasion. The *Boston Journal*, established 84 years ago this month, is one of the very few exchanges to which the BUFFALO JOURNAL has to show the deference due to seniority.

HARPER'S for December 1911, well illustrates the attraction of medicine for the public. Kipling has a story of obsessions due to the hereditary memory of maternal impressions. Mental and other disease is often worked into the plot of this author and, unfortunately, verisimilitude rather than verity, backed by his forceful pen, gives erroneous impressions. Max Sinclair contributes an amusing and nearly tragic story of the wiles of a Superintendent of Nurses who almost beguiled into matrimony the secretary of the hospital, via a suggested neurasthenia. Dr. Henry Smith Williams presents a really scientific article on the Struggle for Immunity.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

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No. 7

Which part of a medical meeting do you enjoy most, learning a new test, treatment or scientific fact; fighting over an amendment; or the collation?

Editorial Announcements.

THE interesting and ideally brief article "Penetrating Wound of the Orbit with Dislodgement of the Vomer," in the January issue, was by Dr. H. W. Cowper. The omission was supplied on both sets of proof but, somehow persisted.

PHYSICIANS have, from time to time, received announcements of ordinances and laws regarding the reporting of disease, filing of certificates, etc. Many other legal requirements exist of which the younger physicians have never been informed and which the older ones may have forgotten. Dr. Francis E. Fronczak is preparing a careful tabulation of national, state and local requirements of this general nature, for the guidance of physicians. We expect to publish the first installment in the March issue.

The Dutchess County Resolution Regarding State Censorship.

THE Medical Society of the County of Dutchess, is again asking other county societies to memorialize the State Society, with the ultimate object of placing the censorship of medical ethics in the hands of the latter, instead of the county societies, as at present. The reason is the difficulty of securing efficient control in counties of comparatively sparse population.

With the general principle of securing efficient control of medical practice, the *BUFFALO MEDICAL JOURNAL* is in hearty sympathy. As to the exact machinery employed, we are indifferent, provided that it accomplishes the desired result. We feel, however, that county societies of comparatively large membership, especially those in which the majority of members and the majority of offending practitioners are found in cities, are justified in insisting on the established precedent of home rule. When a county society, on mature reflexion, is convinced that it cannot properly deal with the problem, provision should be made for its transfer to the State Society. Yet, it may be worth considering whether the same factors urged for this transfer, would not tend to prevent efficient action by the central body, unless by a return to the former system of a permanent, limited State membership and by a rather elaborate and expensive official organization.

Typhoid Mortality. What May Be Done.

We appropriate the following table from the *Canada Lancet*.
THE ANNUAL DEATH RATE FROM TYPHOID FEVER PER MILLION OF
THE POPULATION.

	Average 1901-1904.	Average 1905-1908.	Per Cent. of Decrease.
Spain	459	362	21
U. S. (Reg. Area)	332	288	13
Italy	358	283	20
Austria	198	156	21
Servia	808	147	81
Belgium	175	122	30
Ireland	134	91	32
England and Wales	118	80	31
Scotland	122	74	38
Netherlands.....	87	72	16
Prussia	91	61	32
German Empire	75	53	29
Switzerland	65	46	28

It is only fair to observe that Switzerland has advantages in regard to water supply which are almost without parallel, most of the country being within easy piping distance of what is practically distilled water, precipitated on an almost uninhabitable region and deliverable by gravity sufficiently cool for drinking at any time of the year. But it is not pleasant to think that the United States has next to the worst record of the civilized world and that, in spite of its natural advantages, it has four times the mortality of Holland, overcrowded, water-soaked and with little

dependence on gravity either for obtaining water or carrying off sewage. We know what to do, let us do it.

The National White Cross Association.

We are in receipt of Bulletin No. 6, "for professional Co-operation solely," and learn that the "Association was founded some years ago by doctors to obtain through common study and experiment, the best practical scientific aids for use in their practice." The insignia consists of a white Maltese cross bearing the device, at times of a girl with spinal curvature, at others of a stork with the inevitable baby. There follows an illustrated dissertation on spinal curvature, etc., hernia, varicose veins, corsets, anatomy, sphygmomanometers, vibrators, speaking tubes for deaf persons, whirling sprays—particularly appropriate to the stork insignia—high frequency coils, therapeutic lamps, pocket surgical sets, stethoscopes, pessaries, stationery, etc., with prices.

Unfortunately we—and the pronoun may be taken professionally or editorially—earn our living by the misfortunes of the people so that it may be a case of the pot calling the kettle black but, gentlemen of the exceedingly miscellaneous firms who are issuing this circular, we want to say just a few words in regard to advertising. We are not a sentimental profession or people but there are some things, like the cross and the flag, that are sacred. Aside from its ultimate religious symbolism, the cross, of whatever type and color, is accorded by common consent to various altruistic and philanthropic associations. It is not appropriate to business ventures, however legitimate these may be in themselves, any more than the temple was considered the appropriate location for money-changers by the One with whom the cross is especially associated.

There is another point worth considering. We confess that we were fooled by your announcement to the extent that we were prepared to donate time and printers' charges to whatever phase of philanthropy the Association might foster, whether it dealt with the "white plague," or the sexual evil, which naturally suggested themselves, or to any other good cause. But it is still a long time to the first of April and, even on that day, it is not good business to play too many jokes on prospective customers.

The form of your advertisement shows that you realize that a circular is not read by busy men, if they know it is an advertisement. Advertising is a perfectly legitimate phase of business, its value depends upon its legitimacy, just as truly as the ultimate market for any commodity depends upon its merit.

Finally, magazine advertising, is the cheapest in actual cost and the most efficient.

Public Comfort Stations.

THE BUFFALO MEDICAL JOURNAL advocates the establishment of a number of toilet and rest rooms at convenient points, in all of the cities in its territory. The JOURNAL asks the coöperation of the newspapers in developing public sentiment and local legislation along this line. The reform is too clearly within the domain of health, decency and philanthropy, to require argument. Such stations should be absolutely free; they should be properly attended to insure cleanliness; they should be open all the time; they should be not only water closets but lavatories and places where the tired and sick may rest and receive emergency care; we can see no objection to including provision for persons wishing to eat luncheon which they carry, a supply of pure water, etc.

Whether soft drinks, light refreshments and confections should be sold at such places or not, is a matter on which we have no special opinion. This reminds us, however: Delaware Park, Buffalo, is a very pleasant spot especially at the close of a summer day and, when one gets hungry it is very convenient to go to the Casino for supper. But, somehow, after doing so a couple of times, there is tendency to go home or down town for supper. On Sunday afternoons, it is a pleasure to see crowds of people in the Park and to feel that it is the recreation place for the poor even more than for the rich. It does one's heart good to see working men with their wives and a long following of children. Did you ever watch such a family party file onto the verandah of the Casino, in anticipation of an ice cream soda and note the man's consternation when he was charged ten cents instead of the customary five? If there is anything in the theory that the parks are for the masses, is it not worth the while of the Commissioners to see that good quality and popular prices prevail? Or if the ten cent charge is to persist, why not bring the quality above the three cent mark?

Postal Rates.

WE have received several communications from publishers asking our coöperation to oppose certain projected changes in postage, and to favor other changes not projected but highly desirable. We have hesitated to respond, on account of the policy of limiting matter as closely as possible to strictly medical topics. However, this is a matter that concerns us all and we therefore, present the following views for what they are worth.

1. The Post Office should be self-supporting but not a source of revenue, beyond a small margin of safety.

2. At present, greater efficiency of service is more needed than a lowering of rates.

3. The Post Office should monopolize, so far as practicable, the transmission of personal messages, printed matter of the nature of news, literature, etc., and packages, of all sorts up to the maximum practicable limit of size and weight. The inclusion of messages requiring speed and the reduction of prices on packages is more important to the people than a slight reduction of rates on matter at present handled by post. Yes, call us a paternalist, socialist or anything else you please, we mean government handling of the telephone, telegraph and express. Increased facilities for local collection, sorting and delivery should also be provided, at least to the point that a message and answer may be obtained with certainty in any one day, in the same town.

4. There should be an extension, rather than a reduction of postal facilities on Sunday, for exactly the same reasons that street cars should run on Sunday.

5. We do not believe in reducing letter postage generally. There are too many persons who ought to be plowing, laying bricks, selling underwear, running typewriters and washing dishes, but who are frittering away their time trying to be authors. These persons should not be encouraged by making the mailing of manuscripts cheaper. Another reason is that it is worth something to be able to deposit circulars promptly in the waste paper basket.

6. Against our own interests, we believe that publishers should not be unduly favored. Too many trees are being ground up to make paper and there is too much eye strain and waste of time in reading the great mass of "literature" with which the country is flooded. Publishers should pay what the transmission of their periodicals cost, with due regard to the bulk of business afforded, and the fact that not so much haste is required as in the handling of letters.

7. We do not regard it as feasible to distinguish between reading matter and advertising in charging postage rates on magazines, etc., and while we believe that there should be a discrimination between magazines issued solely or mainly as advertisements and bona fide periodicals, we think the regulations should be altered so as to allow free sampling. Rather should each magazine be judged on its own merits.

8. We hold that it is manifestly unfair to charge more for delivery in the city of publication than 3,000 miles away.

9. Foreign postage should be reduced to a single uniform price.

Calories and Fires.

It is a far cry from dietetics to the prevention of loss of life and property by conflagrations but the recent Equitable Building fire in New York and the destruction of fire-proof buildings with their contents in Baltimore a few years ago, lead us to suggest that a new problem has developed for firemen, insurance companies, building engineers and others especially interested, which, in our humble opinion, can be satisfactorily solved only by a study of caloric values, quite analogous to that which the dietetician applies to foods.

As the result of empiricism, many centuries old, man is in possession of information as to combustible or fire proof qualities of various substances used in building. As a result of more recent empiricism, it has been demonstrated that incombustible material subjected to heat, will crumble, crack, warp or otherwise succumb, and that combustible material inclosed in the nearest approach to non-conductive material will be destroyed and that these disastrous results may be due to combustion of parts of a building of very minor proportion to the whole, or of ordinary contents, or of surrounding structures.

In theory, and to some extent in practice, the contents of any room of a fire proof building may burn up without endangering adjoining apartments and the burning of a non-fire-proof structure near a fire proof one, should not damage the latter to any great degree. That there are exceptions to these rules, has been learned by bitter experience. It has also been learned that, within reasonable limits of size and height—say two or three stories—a substantially built structure composed almost entirely of wood is about as safe for the inmates, about as likely to be saved by fire apparatus of modern type, and involves about as little liability of loss of valuables inclosed in safes and vaults, as one composed almost entirely of fire proof material.

The special lesson of certain fires in New York and Philadelphia, has been to emphasize the fact that, so far as safety of inmates is concerned, fire proof construction is valueless if the contents are highly inflammable; while the special lesson of the Baltimore fire was that a building almost perfectly fire proof, and free from special danger from contents was not a protection to contents, human or otherwise and could not even maintain its own skeletal integrity, if subjected to extrinsic heat from large fires occurring in combustible and partially fire proof surrounding

structures. In fact, the tendency to build fire proof structures to a great height, makes them especially dangerous to occupants, contents, fire fighters and wreckers, if they are subjected to a certain heat strain.

These lessons show that men professionally interested in fires and professionally responsible for their prophylaxis and treatment have reached a stage which the men professionally interested in disease and professionally responsible for its prophylaxis and treatment, reached some years ago—namely, the stage at which qualitative methods have proved inadequate and must give place to scientific quantitative study.

In other words, it must be known how much combustible material may safely be worked into a building, as doors, wainscoating, mouldings, sashes, etc.; how much combustible furniture and goods may be placed in a room without endangering the life of its occupants and the integrity of other rooms in the same building; how many and how large buildings of freely combustible or slow burning construction may be placed in a given area, without endangering strictly fire proof buildings;—and many more details of like nature must be definitely known.

This involves a scientific study of caloric potentialities of different kinds of material, weighing, study of heat convection under different circumstances.

PERSONAL

OUR readers are requested to send items for this section.

DR. M. A. KING of Rochester, has moved from 80 Clinton Avenue, South to 21 East Avenue. Office hours, 1 to 3 and 7 to 8.

DR. DOUGLAS P. ARNOLD of Buffalo, has been appointed Medical School Inspector.

DR. REGINA FLOOD KEYES and Dr. Mabel Flood of Buffalo, sailed late in January for Cuba, Jamaica and Panama.

DR. FRITZ REICHMANN, State Superintendent of Weights and Measures, declares Troy to be the worst short weight city in the state. Well, one shouldn't expect Avoirdupois weights in Troy.

DR. L. J. KNELL of Buffalo, was elected President of the New York State Council of Elementary School Principals and Teachers, at Syracuse, December 30, 1911. Dr. Knell is a graduate of the Medical Department of the University of Buffalo, who has done his part in the most practical way possible, toward solving the problem of an overcrowded medical profession.

DR. HENRY B. LYON is mayor of Dunkirk. Sir Thomas Boor Crosby, M. D. is the 723d Lord Mayor of London, and the first physician thus honored. He is 81 years old, and is an ex-president of the Hunterian Society. Dr. Sun, is President of China. Doctors ought to make good executives for their whole training is to force results under difficulties. Still, there is an old motto: "Ne sutor ultra crepidam."

DR. THERESA BANNAN of Syracuse, has recently published a valuable historic and genealogic work on the Irish of Onondaga County.

The editor acknowledges the hospitality of Dr. Fayette H. Peck, of Utica, retiring President of the Oneida County Society, and the cordial reception of the members, during a recent trip to Utica.

DR. ROBERT J. TALBOT has been appointed Health Officer of Niagara Falls.

DR. E. E. GILICK of Niagara has been appointed a member of the Board of Education.

DR. J. F. CROWLEY of Batavia has been appointed physician for the town poor.

DR. JOHN M. SWAN has resigned as Medical Superintendent of the Glen Springs, of Watkins.

DR. F. PARKE LEWIS of Buffalo has returned from Europe.

DR. G. F. SMITH of Falconer, gave a lecture on the Relation of Alcohol to Health, before the T. P. C. T. U., January 26, 1912.

DR. H. M. EDMUNDS was appointed Health Officer of Tonawanda, January 26, 1912.

DR. C. R. BROWN, has returned to Perry, after some time spent in Buffalo.

D. H. SQUIER, D. D. S. of Buffalo, was elected Vice-President of the Institute of Dental Pedagogics at Chicago, January 27, 1912.

DR. C. W. CLENDENAN of North Tonawanda sustained a fracture of the fore-arm while cranking his automobile, January 28, 1912.

DR. C. S. JONES of Pittsburgh, was the guest of Dr. A. E. Hubbard of Buffalo, late in January.

DR. A. VANDER VEER of Albany writes us from the Hotel Clarendon, Sea Breeze, Fla.

DR. CHARLES CARY of Buffalo is in Panama.

DR. CHARLES D. AARON of Detroit delivered the opening address at the beginning of the 61st session of Heidelberg University, Tiffin, Ohio.

DURING a recent professional trip to Lockport, we had a pleasant visit with one of our oldest subscribers, Dr. C. N. Palmer. Dr. Palmer is the grandson of a Revolutionary soldier and has, in his possession, the gun carried by the latter before he became an officer. It may be of interest to note that the last Revolutionary veteran died about the time that the Civil War began. It is doubtful whether any Sons and Daughters, in the literal sense survive, though several lived well into the present century, and even grandchildren are few.

DR. CLIFFORD V. C. COMFORT of Rochester (University of Buffalo, 1897), has been nominated for a lieutenancy in the Medical Corps of the National Guard.

DR. MYRON B. PALMER of Rochester, has been elected president of the Hospital Medical Society.

DR. J. W. MAGILL (Buffalo 1887) and Dr. O. E. Jones, have been appointed Surgeons to the Rochester General Hospital.

DR. WILLIAM F. FRASCH of Rochester (University of Buffalo 1902), is making a good recovery following an operation for strangulated hernia.

DR. HENRY T. WILLIAMS of Rochester, has been appointed on the Park Board.

OBITUARY

OUR readers are requested to send notices of deaths of physicians in western New York, or who have resided elsewhere but have been graduates of schools of this region or who have otherwise been identified with this region. State residence, date of death, age, cause of death, school of graduation, and other items of interest.

DR. GEORGE STRASENBURGH died at his home in Morton, N. Y., December 26, 1911, aged 79, of apoplexy. He was a graduate in arts of Queen's College, of Kingston; in theology of Toronto University, and in medicine of the University of Buffalo, 1882. While the greater part of his life was spent in the Presbyterian ministry, he had practiced medicine in Morton for the last ten years and was health officer of the town. He is survived by his wife and by three sons, Dr. Frederick A. Strassenburgh of Avon, Robert J. Strassenburgh, a pharmacist of Rochester, and Sidney G. Strassenburgh of Morton.

MRS. ELIZABETH ANN RENFREW WILLOUGHBY CRONYN, widow of the late Dr. John Cronyn of Buffalo, died December 30, 1911, aged 89.

DR. A. B. STRAIGHT of Hornell, died January 9, 1912, aged 46. He was formerly a Methodist minister. He was a graduate in medicine of the P. & S. of Baltimore, 1891.

DR. FAIRFIELD SNYDER, Buffalo 1872, died November 10, 1911 at Carumna, Ind., of cerebral hemorrhage, aged 64.

DR. ISAAC R. WILLIAMS, died January 21, 1912, in Rochester, quite suddenly. He was a soldier of the Civil War. Later, he practiced in Binghamton and subsequently in Walton.

DR. SIMON, a bacteriologist of Zurich, Switzerland, died January 5, 1912, from septicaemia due to the bite of an infected mouse. He was endeavoring to prepare a serum. "Peace hath her heroes, no less than war." Or will the ants regard this as a righteous retribution?

DR. JAMES S. SMITH of Buffalo, died January 30, 1912, aged 79. He was a graduate of the University of Buffalo, 1862.

BOOKS AND AUTHORS

Diseases of the Ear, Nose and Throat, Medical and Surgical. Dr. Wendell Christopher Phillips, New York; published by the F. A. Davis Co., Philadelphia, 1911. 847 pages, 545 illustrations, 31 full page plates. \$6.00.

One hundred pages and 100 illustrations are devoted to the diseases of the mastoid process. This is a good index of the thoroughness of the work. The author has the knack of getting at the root of things and his book is large, not because of prolixity but of abundance of real material.

Scientific Features of Modern Medicine, Frederic S. Lee, Ph.D., Dalton Professor of Physiology, Columbia University. Columbia University Press, 1911. 12mo, cloth, 183 pages, \$1.50.

This book is a collection of one series of Jesup lectures. Such work as this, presented by a man in close touch with scientific medical progress but not himself a member of the medical profession, is of the utmost value in two ways: To the laity, it gives a fair and much needed appreciation of what modern medicine stands for; to the practitioner, it affords a broad view of fundamental principles and actual accomplishments, all the more valuable because not obscured by the detailed superstructure of medicine as an art.

Minor Surgery, Leonard A. Bidwell, F.R.C.S., London; published by the University of London Press, 1911. 265 pages, 88 illustrations \$2.00.

This work includes repair of tendons, technic of injections as of "606," tuberculin, vaccinations, fractures and many details not formerly considered *minor*. While books of this sort suggest to the sarcastic reviewer, the fable of the ancient philosopher who cut a doorway for his cat and a small one for the kitten, there is no question but that they fulfill an actual demand and perform a useful service, especially when so well composed as the present.

Anaesthesia and Analgesia, J. D. Mortimer, M.B., M.R.C.S., London; published by the University of London Press, 1911, 273 pages, 29 illustrations, \$2.00.

This book is conspicuous by its omission of many complicated modern apparatus for the administration of new anaesthetics. It adheres to conservative views, as the general safety of aether; the limitations of spinal anaesthesia. It omits, also, many recent local analgesics. But, it shows thorough experience with the subject, sound judgement and careful attention to detail. The reader may, at first be disappointed with the omissions indicated but he will be impressed that this author, who is not too hurried to spell anaesthesia with a diphthong and who writes his name with initials instead of after the modern fashion, would be a safe man to administer an anaesthetic and that he is a safe teacher to follow. We have old-fashioned prejudices on this subject, strengthened by the death from carbon dioxide, of a patient operated on under the most modern circumstances. The apparatus was all right but the assistant got a trifle confused with the valves and the operator was one of the kind who did not want germ-laden internists and family doctors distracting his attention by fussing about the heart and respiration, liability to chill from exposed wet surfaces, etc.

The Blood and Its Third Anatomical Element. Application of the Microzymian Theory of the living organization to the study of the anatomical and chemical constitution of the blood and to that of the anatomical and physiological causes of the phenomena of its coagulation and of its other spontaneous changes. By **A. Bechamp**, formerly Professor in the Medical Faculty of Montpellier (France) corresponding member of the Academy of Medicine, etc. Translated from the French by **Montague R. Leverson**, M.D., of the Baltimore Medical School and M.A. and Ph.D. of the University of Gottingen. 438 pages. Cloth, \$1.50. Postage, 10 cents. Philadelphia, Pa. Boericke & Tafel. 1911.

Two of the staff of the BUFFALO MEDICAL JOURNAL have vainly tried to review this book. Its venerable author, who died in 1908, aged nearly 92, holds such different conceptions of histology and pathology from those which we have been taught, that his work is incomprehensible. We say this in no disrespectful spirit and with no arrogance. One of our homoeopathic exchanges dodges the issue in much the same way, though more critically. There is much that is of great interest in the book aside from the fact that a general upsetting of preconceived notions is wholesome mental gymnastics. The results of a life time of study by a scholarly man, along lines of thought widely diverging from those of the majority of pathologists, deserve, we think, the serious attention of experts. There is always the possibility that the majority view is not the right one and, if it is, the trained student should get many hints for research from one who disagrees with the majority.

Case Histories in Medicine, illustrating the diagnosis, prognosis and treatment of disease, by **Richard C. Cabot**, M.D., Boston. Published by **W. M. Leonard**, Boston, 1911. Second edition, 295 pages, cloth, \$3.00.

We have already reviewed several books of the Case History Series and can only reiterate the favorable opinion regarding the clinical practical method of thus presenting problems in medicine in orderly sequence. This method not only teaches facts, it teaches the reader to think. Dr. Cabot explores and maps out unfamiliar fields of medicine and discovers new and valuable facts in fields already well known by name, in the same way that his ancestors added to the world's knowledge of geography and made possible various economic developments.

Further Researches into Induced Cell-Reproduction and Cancer, **H. C. Ross**, M.R.C.S., L.R.C.P., London, **E. H. Ross** (idem), and **J. W. Cropper**, M.B., M.Sc., Liverpool. The McFadden Researches, published by **John Murray**, London; represented by P. Blakiston's Son and Co., Philadelphia. 63 pages, illustrated, \$1.00.

Not only is there much difference of opinion regarding cell reproduction and allied experimental findings but there has de-

veloped considerable acrimony regarding the relations of the authors to a committee as to whose exact constitution and authority, we are not definitely informed. At any rate, the investigations are of great interest and the contribution is of especial value while the nature of cancer is being threshed out.

Byron Robinson, *A Memorial*, including the addresses and tributes presented at a public meeting at the Whitney Opera House, May 22, 1910.

Byron Robinson's contributions to gynaecology and to the study of the sympathetic system are well known and highly appreciated. Few of us who have read his works, in whole or part, have been able to do them full justice or to do ourselves full justice in their application because of lack of knowledge of the subject. He was a tireless worker, closely approaching the German type in his diligence and attention to detail. The one thing for which he lacked time, was to put forth his results in such a way as to appeal to the average, lazy or otherwise engaged American student who likes to have his mental pabulum predigested. For these reasons, we believe that the true appreciation and utilization of his works remains for the future.

A Text Book of Alkaloidal Therapeutics, by **W. F. Waugh**, M.D., and **W. C. Abbott**, M.D., third edition, published by the Abbott Press, Chicago, 1911. 762 pages.

The key note of so-called alkaloidal therapeutics, a somewhat inclusive term, is to use "the smallest possible quantity of the best obtainable means to produce a desired therapeutic result." "Alkaloidal," therefore, refers not only to alkaloids in the strict sense, but to glucosides, to concentrated extracts when single active principles are not available and to many definite chemic substances now derived from crude plants and animal organs. The book, therefore, may be described as a work on materia medica and therapeutics with crude drugs and Galenicals omitted. With a very brief introduction, the work is arranged alphabetically, ending with a reference table arranged by disease names and referring to drugs of use in each condition, and with a long list of authorities quoted.

It is, in a sense, unfortunate, that the movement toward the use of pure, concentrated drugs, has depended largely on commercial interests; still more unfortunate that this fact has in some quarters aroused a prejudice against such therapeutics and an unwillingness to give credit for the scientific and practical value of the work accomplished for the profession itself. The

fact that the business has prospered should not blind us to the fact that both the medical profession and the laity have benefited by the availability of active drugs, in such form as minimize the negative danger of deterioration and the positive danger of overdose. While these dangers become progressively less as pharmaceutical and medical education becomes more thorough, there is always danger from a powerful drug in bulk, either through mislabeling, failure to read a label or confusion as to the proper dosage. With drugs in convenient units, each representing an average single dose, these dangers are reduced to a minimum.

In addition, it may be said that the book contains, in convenient form, either for study or reference, a vast amount of therapeutic information, sufficient indeed for all but the occasional moot point.

An Introduction to Dermatology, by **Norman Walker, M.D., F.R.C.P.**, Physician for Diseases of the Skin, The Royal Infirmary, Edinburgh. Fifth edition, 1911. Published by William Wood & Co., New York. 346 pages, 43 colored plates and 79 illustrations.

In volume 39, page 306, of this journal, about twelve years ago, in commenting upon the first edition of Walker's *Introduction to Dermatology*, we took occasion to commend to the attention of physicians for whom the author primarily intended his work and who undoubtedly gained considerable information from it about the subjects of which it treated; but it is very doubtful if the knowledge acquired therefrom has been of much use to the student as was stated in reviewing this edition for it conveyed so much of the then latest information upon disputed points concerning skin diseases, that it probably led the mere student to dangerous conclusions. Nevertheless, Dr. Walker's book became a standard, not alone in England, but in America as well.

The fifth edition is a marked improvement over the first, the author making it more practical; the features that appeared somewhat too positive in former editions have been modified but we cannot deny the verity and originality which then characterized his exposition of them. The language is condensed, but never to the point of obscurity. The author has borrowed from medical sources, but the work is essentially an expression of personal observation. The topics considered, although briefly disposed of in some instances, are numerous and varied. For instance, syphilis only receives a few pages and as stated in the previous review, it would have been better had it been omitted, although the many criticisms mentioned in the first review have been heeded and the book shaped along lines which are permanent. This edition at least looks far into the future and is certain from its

excellence to be long lived, because of the improvements due to repeated revision.

The illustrations are for the most part of a practical kind; some are merely outlined in black and white, some are photographs from life and appeared in the first edition, and some are now colored plates from casts which were beautiful examples of accurate representation of cutaneous eruptions which would be difficult to improve. The text, paper and binding are of a high class; the physician, even the dermatologist will find this volume a distinct addition to the already formidable list of dermatologic text-books.

G.W.W.

Diseases of Children for Nurses. Including Infant Feeding, Therapeutic Measures Employed in Childhood, Treatment for Emergencies, Prophylaxis, Hygiene and Nursing. By **Robert S. McCombs**, M.D., Assistant Physician to the Dispensary and Instructor of Nurses at the Children's Hospital of Philadelphia. Second edition revised. Octavo of 470 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$2.00 net.

The book had its foundation in the lectures given nurses at the Children's Hospital in Philadelphia, and has been amplified to suit the needs of the nurse anywhere. It has a short description of each disease found in early childhood, with enough anatomy and pathology to give an idea of the body structure and the changes caused by disease. Some treatment is given where it seemed that intelligent application of the remedial measure justified it. Treatment of emergencies is much fuller. Prophylaxis, infant feeding, and infant nursing are given full and detailed space. Intestinal diseases and artificial feeding have full space. Nurses trained in hospitals which do not devote special attention to children are weak on these points, and we know that this book will set them right on many little but vitally important points by which they will often be judged by both the laity and by the physician.

The Anatomic Histological Process of Bright's Disease, and Their Relation to the Functional Changes. Lectures delivered in the Russell Sage Institute of Pathology. City Hospital, New York, during the winter of 1909, by **Horst Oertel**, Director of the Russell Sage Institute of Pathology. Illustrated. Published by W. B. Saunders Company, Philadelphia and London. Price, \$5.

Contains 45 figures and plates. The text is a veritable post-graduate course in the histology and pathology of Bright's disease. As a whole, it is a deftly interwoven word picture of conditions and relations which are inseparable in practice, but which are widely separated in the ordinary method of studying pathology and histology. This scheme is unique, not being attempted in any other work printed in English, and is very effective in im-

pressing the salient points upon the mind of the reader. There are five lectures; the first deals with Historical Introduction and Classification. The second considers The Structure of the Normal Kidney and the Different Views on Its Functions in their Relation to the Pathological Variations. The third takes up The Degenerative and Exudative Features of Nephritis. The fourth, The Results and Terminations of Degenerative and Exudative Nephritis; Productive Changes in the Kidney. The fifth, Productive Nephritis; Changes in Other Viscera; Edema. There is a complete index of names, and also one of subjects. It has an appendix, giving classification of Nephritis and the non-inflammatory lesions of the kidney, wrongly grouped as nephritis. A full list of notes and references is given. Every doctor who feels that there is anything about the histologic pathology of Bright's Disease that he does not know, should read this book; it is a gem suited to any graduate in medicine who seeks to improve his knowledge.

The Diagnostics of Internal Medicine by Glentworth Reeve Butler, M.D., Sc.D., LL.D., Brooklyn; published by D. Appleton & Co., New York, 1911, 3d revised edition, 1193 pages, 5 colored plates, 272 illustrations, \$

It must cause some reviewers a feeling of shame to remember that the first edition of this book was condemned as indecent because, in preparing charts of the superficies of the body, the author employed professional models in a business like way and had the illustrations reproduced by modern methods. Naturally, as posing for medical purposes is a very minor part of a model's business, the models were attractive and the reproduction introduced, as it were, a personal element not present in a rough sketch or in a painting. Fortunately, this stage of prudery has passed.

We like to watch the growth of a work through successive editions, especially a work like this or Simon's, which struck out into comparatively untried fields and which represents so large a factor of personal hard work. While the present book contains comparatively little of personal invention or discovery, the tabulations of scattered contributions, the bringing into logical order of unsystematic observations, the recognition of relations between apparently unrelated phenomena, warrants us in characterizing the work as original. From the reader's standpoint, the work may be regarded as complete, covering, indeed, a far wider range of disease than would be expected and entering into each diagnostic discussion with a surprising fullness. But, from personal experience, we hazard the guess that the author's copy is already interlineated and contains inserts for a still more complete future edition.

Orthopedic Surgery, Dr. E. H. Bradford, Surgeon to the Boston Children's Hospital, etc., and Dr. R. W. Lovett, Associate Surgeon to the Boston Children's Hospital, etc. Publishers, William Wood & Co., 1911. 410 pages; many original illustrations. \$3.50.

In this new edition of their well known textbook, the authors have condensed and eliminated until the book is truly a handbook of ready reference, in which students and practitioners can find brief statements of the generally accepted opinions as to the nature and treatment of orthopedic affections. No theories or discussions are introduced and in treatment there are given chiefly such measures as have been proved of value to the workers in Boston. References are made to many articles or books where the reader may find fuller descriptions of special topics. Of course, this may not always be convenient. For example, Calot's method of applying plaster jackets is cited in such brief form and without illustrations that one would have to consult the original French article to obtain necessary details. Two pages, instead of a paragraph, devoted to this successful method would not be out of place. The increasing use of silk ligaments and Lange's preparation of the same are not given enough prominence. However, the book is a model of clearness and exact statements, with many illustrations, both original and otherwise, which are always to the point. There are no special chapters on medical gymnastics, on the use of Plaster of Paris, or on the *x*-ray as applied to orthopedics. In general, we can recommend the volume heartily as a standard textbook and as an attractive addition to any medical library.

A FINE LINE OF STERILIZED SOLUTIONS.—Hermetically sealed glass ampoules containing sterilized solutions of important drugs for hypodermic use have assumed a commanding place in medicine in a comparatively short period of time. Two or three years ago, seeing the tendency in this direction, Parke, Davis & Co. brought out a modest line of something like a half-dozen formulas, notable among them being solutions of Adrenalin, Codrenin, and Cacodylate of Sodium. From this small beginning the line has expanded until now the company announces a total of about twenty distinct formulas. The full list, we understand, is now appearing in display advertisements in the leading medical journals of the country. Physicians who are interested in this advance in hypodermic medication—and every physician ought to be—will do well to search out these advertisements and familiarize themselves with the comprehensive line of solutions therein offered.

Solutions provided by the glaseptic ampoule, it is obvious, have several advantages over those prepared in the ordinary manner. They are ready for immediate use: there is no necessity to wait until water can be sterilized and cooled. Accuracy of dose is ensured, each ampoule containing a definite quantity of medicament. The solutions are aseptic; they are permanent.

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No. 8

ORIGINAL COMMUNICATIONS

Meningitis

By FLOYD S. CREGO, M. D.

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I have chosen this subject to present to you this evening some points which are of special interest to the surgeon and the general practitioner. Dwelling chiefly on differential diagnosis and the treatment of the various forms which we study.

The first one is that which chiefly interests the surgeon but it also interests the general practitioner because it is so often mistaken for other diseases. I speak of two forms of Pachymeningitis—the chronic external variety and the chronic internal form. Pachymeningitis externa is a slow inflammation of the external layer of the Dura. As you remember the Dura is the periosteum of the internal table of the skull as well as the external covering of the brain. This disease is rather common and is so frequently mistaken for other diseases that it is well worth while to give it a few moments consideration. The cause of this form of meningitis is syphilis, injuries to the head, often very slight—prolonged exposure to heat or cold, prolonged passive congestion. Hence, it is often associated with diseases of the liver. The blood current being interfered with causes a determination of blood to the brain.

The first symptoms of this disease are persistent and localized headache, muscular tremors, frequently epileptiform attacks, confusion of ideas and slight loss of memory—finally insanity. The headache is as I say, localized but frequently it extends over the whole of one side of the head. The pathological condition is a thickening of the Dura and a formation of a membrane between the Dura and the skull. The bones also are thickened and nodes appear on the external surface of the skull. This is one of the useful symptoms in differential diagnosis, namely—the determination of these nodes or a general thickening of the bone which can usually be determined by palpation. Thus, in every case of localized headache it is manifestly of the greatest importance to determine whether these nodes or thickening of the skull is present. This disease as I say, progresses and terminates in mental disease, hence an early diagnosis is essential.

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Diagnosis—it is often mistaken for hysteria, neurasthenia or megrim, as in some cases the severer pain comes on periodically or from time to time. It is also mistaken for epilepsy. In fact, if allowed to continue, it will produce an irritation of the cortex similar to true Jacksonian epilepsy. The headache of hysteria is not so persistent and localized. The headache of neurasthenia is never localized and has the other symptoms common to this disease. The epilepiform attacks are of the petitmal variety often times and muscular weaknesses and muscular tremors are present which is not the case in true epilepsy. The nodes on the skull, when present, and the persistent headache are the chief diagnostic symptoms. The cerebro-spinal fluid may also assist us in diagnosis. When the disease is syphilitic the cerebro-spinal fluid contains lymphocytes. As you know the cerebro-spinal fluid does not normally contain more than one or two lymphocytes to each field but in syphilis of the brain and its membranes we have lymphocytosis. That is, from forty to 120 lymphocytes being present in each field. The only other diseases in which these lymphocytes are found are paresis, tabes, herpes zoster, mumps so in the absence of these diseases we can be sure we have to deal with a Pachymeningitis externa if headache, muscular tremors, nodes on the skull and lymphocytosis are present.

The treatment of this disease when it is not syphilitic is surgical. A considerable portion of the skull should be removed. The location of the headache or better yet, the muscular tremor of a certain group of muscles being the guide, the head being trephined over the center controlling the muscles affected. When the disease is syphilitic the hypodermic use of Iodipin first for the prescribed length of time followed by the hypodermic use of the cyanide of mercury is the treatment. The Iodipin is given in doses of 4 c.c. increased to 10 c.c. of the 25% solution of Iodipin, about 40 doses are given—one each day, and usually the headache and other symptoms immediately subside. Iodipin has been found in the saliva and urine from six to nine months after this drug has been discontinued. When we fail to get an immediate result we should resort to the inter venous use of salvarsan two or three doses a month apart being advised. The usual precautions should be followed i.e. that the optic nerve shows no degeneration and the kidneys be in good condition.

Iodipin is one of the remedies which produces great results in the treatment of syphilis of the nervous system and those affections of the nervous system which we designate as tertiary manifestations.

Great care was taken in the experiments with this drug before any announcement was made of it, and the combination seemed to be one of a highly scientific character.

Iodipin was introduced by Winternitz in 1897 but as is usually the case with these drugs, it is just coming into general use,

as some of the first reports were not very favorable to the drug as it was not used according to the idea of its discoverer.

Iodipin is a combination of Iodine with the fatty acids of sesame oil whereby it loses its characteristic odor, taste and irritating properties. It is not a mere solution of iodine, but is a chemical compound.

It has been demonstrated by Winternitz that iodipin given either by mouth or subcutaneously, is carried to every tissue of the organism and Iodine could be detected in the abdominal fat and subcutaneous cellular tissues, all the viscera, especially the liver, muscle fibers and bones. The iodine of the iodipin is liberated in the intestines or in the blood being converted into the soluble iodine while the fat is oxidized and acts as a nutrient.

The elimination of iodipin is gradual and continuous and on this account the drug may be administered for a long period in considerable quantities without disturbing digestion or creating any signs of iodism. Doctors Winkler and Stein found that the saliva gave the first reaction usually in 15 to 30 minutes, sometimes 45 minutes, after administration. Dornbluth found iodine in the urine in from 10 to 20 minutes after the first dose of iodipin had been administered and could demonstrate its presence 5 to 10 weeks after the last injection had been given. I saw a case in Jena Germany which had been given the iodipin treatment and no other form of iodine than this for six months previous, which showed the iodine reaction in the saliva and urine. One other note I saw on this subject said that iodine was present one year after treatment by this drug, no iodine having been administered in the meantime and no iodide fats. Iodipin is a combination of iodine with the higher unsaturated fatty acids which are present as glycerides in sesame oil.

The best method of administering iodipin is subcutaneously, being injected into the tissues in the intrascapular region and down the back. Of course the usual antiseptic measures are observed, care being taken that if a large vein is injured another spot is used to make the injection instead of the spot where the vein has been injured. This is accomplished by using a larger needle, introducing it before it is attached to the syringe and observing if there is any large amount of blood drawn which will follow up into the needle. In case no such complication is present the injection is given and usually no abscess follows. In all the cases I have observed there has not been an abscess in a single case. There is said to be a marked reaction to this drug sometimes, the temperature being very high or subnormal. In such cases the drug is discontinued for a short time and then given later. There is very rarely a patient who cannot take this

drug and I have only seen one case of iodism and that was in a man who admitted he had had syphilis 8 years ago and who after taking the drug in 4 c.c. doses for a number of times developed a rash which looked very much to me like a scarlet rash. The rash disappeared in a few days, but it was not of the peculiar type of iodide acne. In fact, I have never seen the iodine acne such as we get from potassium iodide, in any given case.

In order to tell whether iodipin given by mouth or hypodermically has been utilized in the body, it becomes necessary to ascertain in what form the iodine is eliminated through the urine, etc. We tested the urine for iodized fats and iodine soaps during iodipin treatment.

These negative results showed clearly enough that human urine excreted during iodipin medication, does not contain fats or soaps, either iodized or uniodized. In other words, iodipin is utilized in the system completely; the iodine is split off and used up, and the fats are fully absorbed.

As I have already stated, the drug is best administered hypodermically although it can also be administered by the mouth. There are two preparations of the drug; a 10% solution for use by the mouth and a 25% solution for hypodermic injections. The dose for the 10% solution is from 4 to 20 c.c. daily. For some time, the 25% could not be obtained but lately it is prepared again by Merck & Co.

Dr. Kindler of the City Hospital at Moabit reports a case of spinal syphilis in which inunction cures and large doses of potassium iodide has been ineffective. Because of the constantly recurring backaches, increasing spasm of the right leg and incontinence of urine the case was treated with iodipin in doses of $2\frac{1}{2}$ drams of the 25% solution injected daily for ten days. After five days the incontinence was stopped and shortly after the spasms and backache also and complete relief of symptoms was brought about after ten days treatment.

The use of mercury may be supplemental to the use of iodipin when thought necessary as is observed by several authors who use it. Where the iodipin is given internally the mercury can be given subcutaneously or by inunction. Where the iodipin is given subcutaneously the mercury is given in the same way in the buttocks. Mercury added to iodipin and injected most always ends in abscess and therefore cannot be employed.

A very interesting case which I have to report this evening was reported to me by a resident physician at the Erie County Hospital, and shows the value of this treatment as well as the value of a lymphocyte count in differential diagnosis. A negro, 30 years of age with symptoms diagnosed as progressive paraly-

sis: tremor of the tongue and indistinct articulation and some mental symptoms, was examined by me. He denied ever having syphilis. The attending surgeon did a lumbar puncture for me. We drew off about 50 drops of the spinal fluid. This was centrifuged for 20 minutes in an ordinary blood centrifuge and a small amount was removed by a pipet and examined under a modified or blind light which showed the presence of from 20 to 30 lymphocytes to each field. This confirmed the diagnosis of cerebro spinal syphilis and we immediately put him on the iodipin treatment and the symptoms rapidly cleared up. I concluded he had a pachymeningitis which was relieved by the treatment. Thus you will see that an apparently hopeless case has apparently completely recovered. It has been some time now since we have heard from the gentleman and I imagine that if he had had a return of the symptoms he would have returned to the hospital. Thus this treatment destroys and absorbs the new formation. To prevent a recurrence of the formation of membrane, mercury should be used. The best form is that of the cyanide of mercury. The 2% solution is used giving from 15 to 30 drops of the drug hypodermically each day for 30 days. To relieve the headache, bromides can be given freely during the treatment in whichever form of treatment is employed, either the surgical or antisymphilitic.

Internal Pachymeningitis is essentially a disease of advanced life. Physiological cerebral atrophy will cause it; frequently seen in persons from 60 to 70 years old, though seen also in younger people. Alcoholism causes 50% of cases; sunstroke and exhausting fevers cause it also.

The symptoms are localized headache, with a feeling of continuous pressure at a certain point. Patients complain of a sensation of something moving back and forth over the brain. There is a slight elevation of temperature, generally not more than 100 to 100.5; the pulse is slow; the respiration is irregular, somewhat of the Cheyne-Stokes order, but not exactly. The pupils are unequal, if the anterior portions be affected. As the membrane increase in thickness we get pressure symptoms and motor disturbance; irregular and spasmodic contractions, partial loss of power in hands and arms, and finally as the paralysis increases complete hemiplegia. The headache gives way to dulness and stupor.

A very characteristic symptom of this disease is the marked remissions; one day you see the patient with a marked hemiplegia, severe headache, elevation of temperature, and the next day he is apparently well. The remission may last a day or two,

and the paralysis and headache entirely disappear. This peculiarity is my reason for speaking of this form.

Pathology. The condition which obtains in this disease is the formation of a membrane on the Dura; just exactly how it forms is somewhat doubtful and disputed. Virchow claims that there is first an oozing, then organization, particularly as it is prone to occur in the aged where there is marked cerebral atrophy which lessens the pressure throughout the Dura and giving an opportunity for the blood to ooze out. Others contend that the internal haemorrhage is a primary lesion with subsequent inflammation and formation of a membrane.

We know that as a result of the process, whatever it may be, that there is formed a thick membrane on the surface of the Dura, which may extend over all of one hemisphere or be very limited. It may be thin, or as thick as $\frac{1}{8}$ of an inch, it is said even thicker.

The Prognosis is unfavorable; but there are a number of cases where patients have recovered.

The Diagnosis is extremely difficult. It may be mistaken for a slow meningeal haemorrhage; but in meningeal haemorrhage we have coma as a general rule; in this disease we never have coma until late, if at all.

By use of the surface thermometer you will find a local elevation of temperature on the side of the head opposite the lesion. Auscultatory percussion may help you to localize the lesion,

It is also mistaken for leptomeningitis; which we shall consider later, and where the temperature is very high and symptoms very acute.

Treatment of the internal variety is local means, surgical treatment as before; if we have localized headache apply cold and counter irritation at the point indicated. Give considerable doses of ergot, and bromides, later on iodides. Mercury has been recommended but I have never had any success in its use, and rely chiefly on iodides, bromides, ergot and counter-irritation, and what I want to emphasise is surgical interference. It is unnecessary to say that the patient should be kept in bed and on a light diet.

Leptomeningitis, is an inflammation of the arachnoid and pia considered under one head. There are two varieties, *simple* and *tubercular*. If we speak of a patient having meningitis, we usually mean leptomeningitis; another term is cerebral menin-

gitis.

Cerebral leptomeningitis is quite common. The simple form is essentially a disease of adult life, though children are not by

any means exempt. In stating that leptomeningitis is quite common, I have followed the German authors but Bramwell says acute leptomeningitis is rare. It must be remembered, he says "That two factors must be present in order that a primary inflammation of the meninges may be produced. The infective organism must be present and the predisposing cause such as trammatism, insolation exposure to cold and alcoholism."

Councilman found in 60 consecutive cases the following organisms; Pneumococcus (18), Meningococcus (21), Streptococcus (18), Staphylococcus (2). In two cases only, the nature of the bacterial infection was undetermined. In many cases the pus may pass from the ear in cases of otitis, following the sheaths of the auditory or facial nerve. In many cases the infective process stops short of the Dura and a serous meningitis may result showing no tendency to become purulent. These cases are favorable for treatment, trephining being resorted to. It is secondary to pneumonia and the acute exanthemata, also typhoid fever.

Symptoms. The initial symptoms are three, *headache, vomiting, fever*. Kernig's sign is present but not absolutely pathognomonic. The disease is often ushered in by a chill, sometimes by convulsions. The fever rises *immediately* to its highest point, and this is a diagnostic symptom. It goes up to 102 or 105. The pulse is very rapid and sometimes the respiratory rate is increased but in most cases the respiration is slow in proportion to the temperature and pulse. This is a differential point from pneumonia. This is usually termed the stage of invasion, lasting from one to 24 hours. Frequently the case will run through all the stages in four or six hours. I have known patients to be perfectly well in the morning and to die at night, having gone through all the stages. Toward the end of the first stage delirium is added to the severe headache; for although delirious he indicates the headache by knitting the brows, clasping or striking the head, moans, cries, etc. During the second stage the temperature remains high, the pulse rapid, breathing about the same, sometimes not at all affected, again quite rapid. A very common and persistent symptom is an obstinate constipation. Toward the end of this stage you see another very characteristic symptom, retraction of the abdomen, though not as marked as in the tubercular form.

During the delirium the patient has delusions and hallucinations, just as in acute mania. The tongue is heavily furred, but not so characteristically as in typhoid.

During all this time, although the vomiting has kept up, the patient has a ravenous appetite, and will take anything given him, but rejects it immediately.

We may have other symptoms according to the site of the lesion. If the convex surface be affected the disease is likely to be ushered in by convulsions; if the base be affected we get various paralysis, optic neuritis, strabismus, etc.

Another symptom characteristic of this disease comes on sometimes early, sometimes about the second stage, and that is the *tache cerebrale*; the skin is very red and if you draw your finger across it, you leave a characteristic white line.

We also have cutaneous eruptions, usually herpetic. There is more or less albuminuria, as a general rule. When the base is affected we have opisthotonus, but not so commonly as in the cerebro-spinal type.

The second stage lasts from two to seventy-two hours; then the third stage comes on. The patient falls into a stupor; temperature falls; the pulse rate lowers; the breathing is of the Cheyne-Stokes variety, especially if the base and bulb be affected; pupils are markedly unequal in some cases; in some, with the base affected, we get marked hemiplegia. The convulsions of the second stage have now ceased, the paralysis becomes more marked, the stupor more and more profound.

On the other hand there is sometimes an interval between the second and third stage, the patient may become rational if aroused, and the friends think he is much improved, but you want to be on your guard, for in an hour or two he will probably sink into a final stupor and coma. The leucocyte count is commonly high although notable exceptions occur. Upon lumbar puncture there is found a turbid fluid containing the specific organisms of the meningitis and many cells, the majority of which are polymorphonuclears. The chemical examination shows choline in the cerebro spinal fluid that is due to myelin degeneration. Choline is also found in hysteria and other so called functional nervous diseases giving us the notion that these so called functional diseases are after effects of slight inflammatory conditions.

Diagnosis. It has to be differentiated from acute mania. The premonitory symptoms of acute mania are not present. The causes are entirely different; the fever is characteristic. In acute mania it is rarely over 100, and you have delusions and hallucinations at once; in meningitis you have simply delusions during the height of the fever.

Typhoid fever with delirium is very frequently mistaken for meningitis. Keep in mind the history of the case and the fever line; in typhoid there is a gradual rise, with morning remissions; in meningitis it becomes excessive immediately. Do not mistake the typhoid rash for the herpetic eruption of meningitis, in which there may also be a general eruption, but not the charac-

teristic rose colored rash of typhoid. Then you have the blood test for typhoid which will make mistakes almost impossible.

Delirium tremens is often mistaken for meningitis. In alcoholic delirium you have marked hallucinations of sight; very rarely any temperature, if any, slight, perhaps 100 and its presence is irregular; in meningitis it is constant.

Thrombosis of the cerebral sinuses is mistaken for it, especially in children. In thrombosis you rarely have fever until three or four days after the coma; in other words the *modus operandi* is just reversed; coma, delirium, fever.

Bramwell and others say that meningism or pseudomeningitis is a term applied to a symptom complex met with in the course of some of the infective fevers which cannot be distinguished from the real meningitis from the symptoms alone. In some cases there may be a slight inflammation present, in many there may be a meningeal hyperaemia present and in others the symptoms would appear to be due to the direct effect of a toxin on the brain itself. The true meningitis can be distinguished only by the examination of the cerebro spinal fluid. In the pseudo variety the fluid may emerge under pressure but it is clear and presents normal appearances.

Treatment of leptomeningitis. It consists first, in darkening the room, photophobia being one of the symptoms. Put the patient on a light diet, control the fever to a certain extent by antipyretics; and one of the best is aconite. It works especially well in those cases where there is a high elevation in the morning. Give urotropin 10 to 15 grs. every four hours, the spinal fluid being disinfected thereby. The chief reliance is on urotropin. It is also recommended that the blood be examined bacteriologically and the peculiar infection determined and vaccine treatment be resorted to.

To quiet the patient morphine may be absolutely necessary, but bromides are better as they reduce the amount of blood to the brain, while morphine increases it.

The bowels must be kept open by free purgation. When there is a considerable elevation of temperature I give calomel freely, until we get pretty free catharsis. Stimulate the heart as may be indicated.

You know that during the third stage there is an accumulation of fluid within the cranial cavity, pressure, coma, etc. To forestall that, always start in early with iodide of potassium: just before the stage of coma give large doses and as coma comes on resort to trepanning and spinal puncture. I have a record of six recoveries out of ten cases by use of the urotropin treatment, some with lumbar punctures some medical treatment alone.

Chronic Meningitis. It is a disease not very commonly met with. The causes are rather indefinite, syphilis perhaps being the most common; also cold, dampness, slight injuries to the head, and alcoholism.

Symptoms, are persistent headache, vertigo, a sensation as if there were a band around the head. These patients are very restless at night, taking short sleep or being quite sleepless. As the disease progresses there is defective articulation. As it is essentially chronic, it comes on in from one to three weeks. There is weakness of the limbs; frequently spasm of a particular group of muscles. The patient notices that the memory is weak, or his friends do for him; there are symptoms of depression, more or less general paralysis. During all this time the temperature does not vary greatly, sometimes an uneven temperature of 100, sometimes a constant temperature of 100, in many cases no temperature at all. Finally there is general paralysis. The disease lasts from two to eight weeks.

The reason I speak of this form, in that it is often mistaken for general paralysis of the insane; but the differential points is the peculiar delusions, exalted ideas, etc., found in paresis. In this disease there are no delusions, though there may be slight delirium toward evening. We do not get the characteristic and marked physical symptoms seen in paresis.

Multiple cerebro-spinal sclerosis is often mistaken for it. In this disease we have marked volitional tremor, and nystagmus, no tremor in chronic meningitis. In the sclerosis there are also the spinal symptoms and epileptiform attacks. In meningitis there are no epileptiform attacks; sclerosis lasts from one to six years; meningitis terminates in as many weeks.

Medical treatment is same as acute form. Antisyphilitic treatment when indicated. During the last years a number of surgeons have trephined and aspirated the cerebral sinuses to relieve the pressure. Lumbar puncture is a well established procedure and should be resorted to when coma comes on.

You will notice I have not spoken of the Wasserman test for cerebro-spinal syphilis because the lymphocyte count is much more certain. The Noquehi test is said to be oversensitive in cerebro-spinal cases, giving positive results when the other tests were negative. I have not spoken of the use of Flexner serum in the various forms which I have described as its use is or should be limited to the cerebro-spinal (spotted fever) variety which I will discuss at a future meeting. Flexner's, Merck's and other serums being used only when the diplococcus intercellularis is present. This form of meningitis is so easily determined by a lumbar puncture and a bacteriological examination or in cases

of urgency a smear can be made and the nature of the infection determined in a few minutes, that the serum need not be given as a precautionary measure as recommended by some.

478 DELAWARE AVENUE.

Vincent's Angina.

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ULCERO-MEMBRANOUS, or Vincent's angina, is not so rare a disease as published reports might indicate. To quote Burrage (*Journ. Am. Med. Association*, March 20, 1910), "I have no doubt a positive diagnosis * * * would be made more frequently if, in addition to cultures, smears were made from the pseudo-membrane." The well known difficulty of making cultures of the two symbiotic organisms * * * found in the lesions of this disease is sufficient cause for lack of reports." "Positive diagnosis cannot be made without a microscopic examination of smears from the tonsilar exudates."

Murray (*Journ. Am. Med. Association*, July 31, 1909) states as follows: "Since Plant, in 1894, described a spirillum, and an associated spindle-shaped bacillus, in cases of membranous tonsillitis, and Vincent in 1896, described similar organisms, in cases of hospital gangrene, a large number of observers have reported similar lesions, in which, the spirillum and bacillus have been constantly associated." "These lesions have been described as acute or subacute, ulcerative, or membranous, inflammations, in which were found the characteristics spirilla and bacilla."

Berkely holds (*Med. News*, May 27, 1905), "that Vincent's angina occurs more frequently than is generally supposed: that it is most frequently confounded with syphilis and diphtheria. He asserts that, when one is familiar with its clinical aspects, a fairly accurate diagnosis may be reached without the microscope."

Mrs. L. F., age 18 years, consulted me September 1, 1910, for pruritis vulva. She was six months along with her first pregnancy.

September 16. The pruritus continued, but was less annoying; but she complained of a slight pharyngitis, for which I prescribed mild treatment.

September 20,. There was on each tonsil a small circular ulcer covered with a whitish, cheesy exudate, easily removed by the local application of persulphate of iron and glycerine. I continued the use of the iron and glycerine alone until the 23d when I added peroxide of hydrogen dilute once in two hours through an atomizer.

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September 25. Both tonsils still ulcerated and throat painful.

September 26. Patient at work about the house but tonsils ulcerated as before.

October 2. There has been some slight improvement. For several days has had neuralgic pain of face. Began the use of subacetate of copper locally.

October 12. Have used the subacetate of copper daily, and there has been slow, but steady improvement. But the facial pain has persisted. Discovered today that she is cutting her wisdom teeth.

October 15. Have continued the use of the subacetate of copper locally. As the facial pain has persisted sent her to a dentist.

October 17. The facial pain has disappeared.

October 19. The tonsils appear normal. Have continued the use of the subacetate of copper.

October 24. The tonsils are apparently cured. Some pain in the left side of the face. Again sent her to the dentist.

November 6. Delivered her of a seven months foetus, which, manifestly had been dead for some time. She made a somewhat slow recovery.

November 20. Patient discharged.

Resumé. This patient suffered for more than a month with ulcerated tonsils, not at any time alarming, but very resistant to treatment. Here was an anemic young woman, suffering with a complexity of ailments: Pruritus vulvae, haemorrhoids, eruption of wisdom teeth, neuralgic pain of face, and a persistent ulcerative tonsillitis, which, at first, I considered a simple follicular tonsillitis, ordinarily cured by three or four applications of iron and glycerine. But, this treatment failing, I consulted various works on Practice (Tyson, Osler, and others), but failed to find any mention of this condition (I understand, however, that Osler, in his latest edition, mentions Vincent's angina.) But, scattered through various medical journals, I found numerous abstracts and original articles, descriptive of ulcero-membranous, or Vincent's, angina, to which the symptoms in my patient corresponded. I then substituted the subacetate of copper, (a safe and effective application, safe, in that it does not seriously affect the unbroken mucous membrane while its action is readily checked by peroxide of hydrogen), giving at the same time tonic treatment.

The disease is said to be very prevalent, being undetected because of the mildness of the symptoms.

The predisposing causes, to quote Turnicliffe and Turnicliffe, (*N. Y. Med. Jour.* February 17, 1906), "are use of tobacco, trauma to the mucous membrane, as after tonsilotomy, eruption of a wisdom tooth (vide my case) defective teeth or those covered with tartar, alveolar abscesses, gums of scorbutics, syphilis and mercurial stomatitis, acute infectious diseases. No doubt chronic enlargements of the tonsils and adenoids, predispose.

To quote further, from the very exhaustive article by these same authors; "The majority of cases reported have been in young adults between the ages of eighteen and twenty years. But Athanasius' cases were children between the ages of twenty-six months and thirteen years. The cases the former authors observed were children.

Athanasius and others divide the affection into three periods; the onset, characterized by congestion and oedema; the formation of false membrane; and finally the period of ulceration." "The primary location is usually on the tonsils and edge of the gums, but may extend to the tongue, lips, soft palate, pharyngeal wall and cheek. The stomatitis may occur simultaneously, but each is observed alone. With the progress of the disease the ulcer may become much deeper; sometimes leading to destruction of the tonsils, uvula, and parts of the pharyngeal wall. Sometimes the ulceration is very superficial. The submaxillary and retromaxillary glands are usually swollen but they rarely suppurate. The symptoms vary much with the severity of the attack. Often there are no symptoms or only slight ones: The following occur at the onset: Dryness or discomfort of the throat, dysphagia, lassitude, restlessness at night, loss of appetite, headache, coated tongue, constipation, sometimes diarrhoea, vomiting, pains in the abdomen, chills and fever; but usually there is little or no fever. One to five days after the onset the local condition is observed. With it there are pain in swallowing, salivation, and fetid breath, but not always."

Contagion has been observed, but close contact is apparently required, as by means of pipes, pencils, etc.

The prognosis is usually good, but rarely, considerable destruction of tissue may result, and gangrenous processes and noma may develop. Observers have noticed a tendency for the disease to recur after partial or complete recovery."

McWhinney, (*N. Y. Med. Journ.* August 20, 1910) states as follows: "Clinically we must differentiate this lesion from diphtheria and the mucous patch of syphilis." * * * "The aetiological factor, is the presence of Vincent's spirillum and the fusiform bacillus."

Plant, in 1894, first described a spirillum and spindle-shaped bacillus in cases of membranous amygdalitis. Vincent, in 1896, described similar organisms in cases of hospital gangrene. * * * "The bacillus varies from ten to twelve micra in length, occasionally as short as six micra, and is usually, though not always, associated, with a fine spirillum, extremely long, and on a hanging drop slide, is seen as motile. It is a saprophyte of the buccal cavity but becomes pathogenic in the presence of other organisms. While any of the aniline dyes may be used, the intensity is greatest when gentian violet or aqueous fuchsin is used." Personally, he states, he can recall three cases that were diagnosed as diphtheria, and four as syphilis, clinically, which microscopically revealed a characteristic fusiform bacillus and spirillum. He also states that other organisms are found; often the streptococcus; but the exudate is as a rule characteristic, usually grayish or whitish, and often with a pronounced adenitis." "Cases in which the membrane is thin rarely give rise to much depression. This is not present to a marked degree except where the membrane covers a large area of the tonsil or pharynx, and is of the heavier type."

He reports two cases:

Mr. R. A. N., age 45 years, four month ago had a severe attack of amygdalitis, and a short time after both tonsils were covered with a grayish membrane. * * * Other than difficult deglutition and some depression he felt well. The tonsils were amputated three times at intervals of a month; the membrane recurring. When I examined the case I found on the tonsil stumps a membranous formation; temp. 99.2; pulse 74. Microscopically, by means of smears, Vincent's spirillum and fusiform bacillus were demonstrated. The stumps were enucleated, the capsules completely taken out by the finger, fossae and surrounding area treated for three days with tincture of iodine full strength. Time elapsed since, four months. From the preceding history, and elapsed time, I believe I have effected a cure."

Case 2. Mrs. J. H., age 28 years, sore throat on right side four days. Temperature 99 to 103 but with a pulse of only 36. Had been treated one week as amygdalitis. The right tonsil was found to be swollen and a distinct ulceration seen, two thirds of which, was covered with a grayish or slate colored exudate. Incisions had been previously made above for possible peritonsillar abscess, and these wounds had at once been covered by this exudate. There was great depression, but at the end of four days treatment she was able to eat and on the sixth day went out."

Filatoo and Nevegen, consider chlorate of potassium internally a specific. Crandall, also found that chlorate of potassium

did most good. Tincture of iodine is considered effective. Because of the anaerobic character of the bacillus, peroxide of hydrogen is most useful, applied directly to the seat of the disease.

Sobel and Herrman, used 3 per cent. to 5 per cent. solution of silver nitrate applied daily.

Murray, used peroxide of hydrogen, followed by silver nitrate, 2 per cent. to 10 per cent. and 5 per cent. zinc sulphocarbolate. In three weeks the pseudo-membrane disappeared, and the throat presented a normal appearance.

Fraly, used 50 per cent. argyrol solution after liquor antisepticus, and peroxide of hydrogen, every three hours.

Methylene blue has been used locally. Also iodide of potassium internally.

E. H. Place (*Boston Med. and Surg. Journ.*, November 9, 1911), states, that in his hands, the most satisfactory of the local applications, and one universally successful in a few days, has been swabbing with peroxide of hydrogen full strength or diluted one half, until the ulcer is pretty clean, and then painting with a 2 per cent. solution of chromic acid once daily; the combination working much better than either alone. Cure occurring rapidly in two to six days with hardly an exception. Removal of the tartar from the teeth and oral hygiene are important. He believes that the disease is preventable by proper attention to the teeth, mouth, and general condition. "Vincent's angina should become as unknown as hospital gangrene or typhus fever."

On the whole, the most effective treatment seems to be, tinct. of iodine locally once a day, after thorough swabbing with peroxide of hydrogen, or with the solution of chromic acid as used by Place; with chlorate of potassium internally. However, my patient recovered under the use of subacetate of copper locally, followed by peroxide of hydrogen to neutralize the copper; peroxide spraying, and tonic treatment.

51, EAST MAIN ST.

NASAL DIPHTHERIA, N. A. Christie, M. B., Webwood, Ont., in *Can. Pract. & Review*, January 1912. Male, aged 17, membrane on tonsils and uvula and visible through anterior nares. 4,000 units July 30, 10,000, July 31st. Much cellulitis pushing lower jaw forward. August 5, hæmorrhage from right nostril. Almost complete cast, $\frac{1}{8}$ inch thick, expelled on blowing nose. Similar cast expelled during following night. Hæmorrhage controlled by Tr. ferri chlor. Recovery complicated with diplopia, pharyngeal paralysis, anaemia and general muscular weakness.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

July 1. This morning we were served with orders to be ready to move at a moment's notice, and stood to arms waiting the final order to march until afternoon. Meanwhile, we could see the bursting of the shells above the tree-tops beyond Gettysburg, which proved the beginning of the great battle. While here General Hancock was directed to turn the command of the 3d Corps over to General Gibbon, and proceed post-haste to Taneytown to report to the Commander-in-Chief. The troops finally received orders to proceed thither also, where we arrived about dark. Here we learned that, owing to the death of General Reynolds of the 1st Corps who had been killed that day, General Hancock had been sent to Gettysburg to assume command of all the troops then present on the field. We little understood the full import of this important assignment at the time, but it proved a duty of vast moment for Hancock, as well as a fortunate selection for the Army of the Potomac. It appears that Hancock soon brought order out of the chaos which the death of Reynolds had precipitated, and decided it a proper position for the Army of the Potomac to take up as a defensive line. He so advised Meade, who at once ordered up the whole Army. After resting for an hour at Taneytown we proceeded on our way to Gettysburg, following after our restive and famous Commander as fast as our legs could carry us. We halted for a rest between eleven and twelve o'clock, and I sat down upon a haycock in a field along the roadside, to rest and graze my horse. General Zook soon joined us, sitting on the hay beside me, and we entered into conversation about the importance of the work before us. The moon would occasionally break through the flying clouds,

"The air was refreshing,
"And the ripe harvest of the new-mown hay
"Gave it a sweet and wholesome odor."

The General had bought a horse in Maryland that day, for which he paid \$250.00. It was a handsome animal, and he said it was a good purchase if he lived through the impending battle:

but if he should be killed, in that event, he desired the horse sold. I inferred that he felt apprehensive for his own welfare, and that he might not survive; so I cheered him with a few encouraging words, reminding him of his previous good fortune in battle, etc. Alas! in less than a day he had received his mortal hurt. We soon started on our weary way, and a little after daylight in a misty rain marched upon the field of Gettysburg, taking position on the left-center of line. Just after our regiment had assumed its appointed position, I received an order to report to the Division Hospital as Assistant to Dr. C. S. Wood, one of the chief operating surgeons of the Division. The place selected for the hospital was in an oak opening east of the Taneytown Road, between it and the Baltimore Pike; and, after breakfast, I laid down and slept for several hours, as all was quiet.

This was Thursday, July 2. I awoke about noon, and soon we had dinner; but still there was no fighting. Finally, taking advantage of the dullness and quietude, I mounted my horse and rode over to General Mead's headquarters at the cottage on the Taneytown Road. I hitched to the palings of the fence and went inside the yard, where I met several officers of my acquaintance, visiting with them for perhaps an hour. I expressed a desire to take a look at the field, and was advised to proceed to Cemetery Hill, three quarters of a mile north, where I could get the best view. I did so, and soon became absorbed in the wonderful scene before my eyes, which I surveyed with the aid of a field glass. Looking directly west into the enemy's lines, I saw, in a gap in the woods, troops moving towards our left in considerable numbers. I could readily distinguish the regiments as they passed, and felt sure at the time that the movement was of serious import. Sweeping my glass still farther to the left, I soon saw a line of battle advancing towards the front, which proved to be the 3d Corps moving to take possession of the Emmetsburg Pike. It had been cloudy all day until now, but the sun just then burst through the clouds and glinted across the long line of bayonets; while the colors, unfurling and waving in the bright sunlight, presented a most entrancing sight to the observer. But in a moment this beauty of the parade was changed to the mad clamor of actual warfare; for the enemy's batteries opened as soon as the line had advanced sufficiently far to give them enfilading range. The first smoke brought forth the exclamation from a voice near me, "There, General, go the enemy's batteries," and on looking around to my left and rear, I saw Generals Doubleday and Howard in conversation together, and it was Doubleday who had spoken.

I soon became satisfied myself that they were the enemy's batteries we saw, for the shells commenced coming towards Cemetery Ridge and Hill; so I turned my horse into the road and started on my way back to the hospital. I halted again at Meade's headquarters on the way back, and went into the yard for a moment; but soon everybody there began to take to horse, Meade for the front, Pleasanton for his cavalry on the left, and other officers for their various posts and duty. The fact is, the fire fairly drove them out. I followed Pleasanton who was going in the direction of the hospital, and on the way the shells burst over and around us in frightful rapidity and proximity; but no one was hurt as far as I could observe. Arriving at the place where I had left the hospital, not a person was to be found, and no traces of it could be discovered. I began searching for it, and soon found its new location near a stream protected by a ridge from great danger of shells, though we were somewhat nearer the lines than before. It seems that, during my absence, the hospital was literally shelled out of its first position, and this new place was sought out as a necessity.

The advancing line which I had just seen proved, as I remarked a little way back, to be General Sickles' Third Corps moving to take up position on the Emmetsburg Road. The enemy, too, had been manoeuvring for an attack upon our left all the afternoon; so these two mighty forces came together with an impact, which made the woods resound with the crash. Sickles soon became nearly overpowered, and Hancock went to his rescue with a part of the 2d Corps. The first Division caught the heaviest of the blow, many killed and wounded were the result, and the latter were now being brought to the hospital in great numbers. While busily engaged in their care, I received word that General Zook had been grievously wounded, and, was being moved to a farm house on the Baltimore Pike. I immediately repaired to the place and discovered at once that he was fatally shot, a shell having torn open his left shoulder and chest, exposing the heart-beats to observation. I remained with the General until about eleven o'clock P. M., and left word with Lieutenant Favill, of Zook's staff, that I would come again in the morning should he survive the night, which now looked very improbable. Soon after leaving the house I met a detail of forty soldiers bearing General Sickles, whose thigh had been amputated on the field that evening, to Westminster, twenty-five miles away. This expedient no doubt saved his life, as to have been driven thither in an ambulance would probably have proven fatal.

After working till the small hours of the morning of the 3d, I laid down and obtained a little sleep, but was up and at it again

by daylight. After assisting at many operations, as well as making a number myself to spell the chief operator, I once more repaired to General Zook's side finding him still alive, but rapidly sinking. He lingered, however, until near two o'clock P. M., passing away without a murmur of complaint, and in the full possession of all his mental activity. The famous cannonade, the prelude to Pickett's heroic charge, was in full blast at this hour, and Zook breathed out his life amidst the uproar and mad clamor of two hundred guns—the grandest combat of field artillery the world ever beheld, or held its breath to listen to. As soon as the General breathed his last I made haste for the front, where I knew my services were needed! and I arrived at the hospital not a moment too soon. After the sound of the cannon died away there was a short interval of comparative silence; then came the infantry battle. The 2d Corps received the weight of the shock, and our hospital was soon overflowing with wounded men, in the care of whom we were busy all night. I took a short nap near morning, but began work again soon after daylight the 4th. A heavy rain poured in upon us during the night, continuing during the 4th, and nearly flooding us out. During the 4th, in the midst of a heavy shower, I amputated the thigh of a rebel captain whose name I have forgotten. He belonged to a North Carolina regiment, was full of hope and courage, and I have no doubt he recovered. So the work went on for the next three days until, on the 7th, we were relieved by surgeons from Washington and the North.

THE RETREAT AND PURSUIT OF LEE.

The Army was moving to intercept Lee, if possible, and we must go with the troops, where our services were likely to be needed at any time. General Meade did not permit our hospital wagons to come up until the battle was over, so we were not able to shelter our wounded very well, but in all other respects they were well cared for.

July 9. Yesterday it rained nearly all day, and quite hard for a considerable part thereof; nevertheless, we made a march of twenty-five miles, reaching Frederick about four P. M. Captain James D. Brady, of the staff, and I visited the city in the evening, but all was confusion in the town and we returned to camp, tired and disgusted with our attempt at recreation. Today we are destined for Crampton's Pass, where the Sixth Corps had a battle on the 14th of September last. I stopped at a farm house near noon, owned by a man named Roderick, and wrote a letter home. The family were very kind to me, inviting me to visit them after the war, which I partly promised to do.

July 12. We are again positioned before the enemy near Jones's Cross Roads, having come through a pass in the South Mountain, and are now about five miles from Williamsport near the road leading from Sharpsburg to Hagerstown. Our skirmishers are "at work" about half-a-mile to our front, the nature of the fire indicating that they are meeting quite stubborn resistance.

The 13th. We were busy all day perfecting our breastworks and otherwise preparing for active work with the enemy, and at night received orders looking to an attack upon his position at dawn next morning; but when we awoke on the 14th we found the enemy gone.

July 14. We followed on the heels of the retreating foe as fast as foot, hoof, and wheel would carry us, the 57th being deployed by skirmishers; and before night the First Division had captured nearly 2,000 stragglers from their rear guard. The recent rains made the roads and fields one vast sea of mud, and when we bivouacked at night we were a sight to behold. Every officer and man was covered with mud from his heels to his head, and the animals were as though they had been plastered.

July 16. In the field near Harper's Ferry. We bivouacked on the Virginia side of the Potomac near Williamsport Tuesday night, the 14th, and moved down the river to this point yesterday. We returned to the Maryland side of the river, and passed through Sharpsburg on our way hither, where we saw evidences of the battle of last September, in the yet unrepaired damage to the church and some of the houses. We are in that delightful spot known as "Pleasant Valley," and need rest from the fatigues of the hard fighting, and the long and rapid marching, day and night, of the past month; but I don't think we will be allowed to remain here very long.

July 17. It looks as though we would push into Virginia again tomorrow although we have been quiet today. We left Pleasant Valley Saturday morning, July 18, and marched every day until the 24th, save one, which brought us to Manassas Gap. On the 24 we rested for a few hours in the Gap the enemy being not far away, and ammunition was issued to the troops at two o'clock P. M., Dr. Corry, my second Assistant Surgeon, left today for Washington on sick leave and I forwarded a letter by him to be sent home.

Monday, July 27. Near Warrentown Junction. We have made long and tedious marches for the past ten days, the heat being very oppressive, but we are fortunately resting today. On the night of the 25th we camp at White Plains, where the 6th Corps stopped for three days last fall. Yesterday we marched

twenty miles in the broiling sun, passing Warrentown about five P. M., and reaching this camp at ten o'clock at night. Warrentown is the prettiest Southern village I have seen, is delightfully located, and possesses some fine buildings. A great many of our men are barefooted, and some are half naked; but we may get supplied here. Our horses have been several days without forage, subsisting entirely upon grass; and as for myself, blackberries, of which there is an abundant supply, have been my chief article of diet for a week. We have had no mail since crossing the Potomac, but Lieutenant Snyder, Quartermaster of the 57th, goes to Washington tomorrow to procure clothing for the Division, and I can send a letter by him to keep them at home advised of the fact that I am still alive and well.

July 28. We have received two mails yesterday, with home dates to the 22. My wife writes as though she was anxious for me to leave the service; but the recent successes that have attended our Arms, both east and west, have inspired me with new courage. I have always thought the Army of the Potomac would strike the final blow at the Rebellion, and I have a strong desire to be "in at the death"; so I shall stick. Thus far I have been present at every battle this Army has fought since its organization under McClellan, and I take some pride in maintaining such a good record. No doubt, many find fault because Lee's army was not destroyed before we recrossed the Potomac, but when the entire facts are known, General Meade will be fully justified in the course he pursued. It is useless for me to endeavor to vindicate the Army of the Potomac, or its commanders: history will do us full justice, I have no doubt.

July 30. Still near Warrentown Junction. Yesterday, in company with Colonel Chapman, I paid a visit to the 11th Corps which is near us, where I saw Gad Parker, John McCray and others. Parker tells me that John Boyd, who belongs to his Company, was severely wounded at Gettysburg. We also called upon Lieutenant Colonel Stewart L. Woodford, of the 127th, New York, who is a friend of Colonel Chapman. The weather is cooler as we have had rain, and we are quiet; but I think we shall move again within a day or two.

August 1. We are again within six or seven miles of the Rappahannock at a place called Morrisville, having moved from near Warrentown Junction day before yesterday. We are opposite Kelley's Ford where we may cross, but are now simply guarding the passage. The weather is extremely hot, but I am in good health and spirits. Captain James C. Bronson left for New York today, to fetch on the drafted men for our command. How I envy his prospects of numerous juleps, ices, etc.

August 3. Morrisville was formerly a village of two houses, but one having been totally destroyed by fire, the "town" is only half its original size. I took a ride in company with Quartermaster Snyder to Elkton yesterday, four miles distant towards Warrentown Junction, going through a region infested by guerillas; but we returned in safety at seven-thirty P. M., not having seen one of that muchdreaded "chivalrous gentry." Lieutenant E. L. Palmer, of the 57th, in charge of a picket detail, disappeared on the same road we travelled, night before last, about half way between here and Elkton and is supposed to have been captured by the guerillas. Sickness is increasing, owing to the heat; today I report six men on the sick-list, more than at any time since we left Falmouth. Major Bull, 66th New York, had an adventure with the guerillas near Warrentown, when we were approaching that place a few days ago, an account of which appears in the New York Herald. (It will be found in my scrap-book.) My Brigade was in the rear of the wagon train that day guarding it, and the 57th was the rear regiment. I was in conversation with Major Bull near the broken-down ambulance spoken of not five minutes previous to the appearance of the guerillas, and came very near being mixed up in the affair myself. Our tents are now pitched in the edge of a beautiful wood, and we are delightfully situated in every way, but no telling how long we shall remain so.

August 6. Day before yesterday we changed our camp, moving about a mile and a half, for the purpose of getting better ground, and having water more convenient. Our Regimental Headquarters are now delightfully located on a beautiful knoll, upon the green summit of which stands a large cherry tree, and our tents are pitched around the tree facing inwards, which affords us shade all day long. I hope and believe we shall not have any fighting for a month, which, if my predictions fall true, will give us a much needed rest this hot weather.

APPOINTMENT TO THE CHARGE OF THE HOSPITAL.

August 8. Today, while we were sitting around our cherry tree, enjoying our post-prandial dish of conversation, an orderly rode up and placed in Colonel Chapman's hands an order, which, upon opening, proved to be an appointment for me, placing me in charge of the field hospital of the First Division, relieving in that duty Surgeon George L. Potter, of the 145th Pennsylvania Volunteers. I went to Headquarters immediately to learn the particulars of the change, and to arrange for the transfer of the property, which will take place tomorrow when I assume charge. My tent leaked badly last night, the water saturating my bed in places; but I shall have the tent condemned and get another. We

are now living on green corn, cucumbers, fresh bread, canned tomatoes, peaches, etc.; so we need not complain.

August 10. I am very busy now putting the hospital in order, and systematizing the work. The place I hold is one of hard work and responsibility, but I do not complain; many an older man than I might feel proud to get the position, and I shall endeavor to discharge the duties pertaining to it in such a manner as to merit, and I hope receive, the commendations of my superior officers.

August 12. I regret to hear that Frank Folsom is drafted, but he will, no doubt, get relieved from serving on account of his health. I have thirty men on fatigue duty, building cots, ditching, building arbors across the front of the hospital, and otherwise making it comfortable.

August 14. Today has been cooler, with a shower just at night. I harnessed my horse and hitched him before a top buggy, that was captured by the Provost Marshall, and drove him out four miles and back today. It was considered quite an event, many looking on with interest and enjoying the unusual scene. The papers report the 6th Corps at Warrenton, as having a great time giving balls and parties, which the women of that village attend. It is reported in the Buffalo papers received tonight, that Lyman Bass and Oscar Folsom have both been drafted. They will, of course, both escape service by some device or other. It is also rumored that General Hancock will be appointed to the command of the Army of the Potomac as soon as he is able to take the field again. I hope this may prove true, but I question very much whether the Government will make another change in commanders soon, unless there should arise strong reasons therefor.

August 16. Colonel Chapman has received a letter from Lieutenant Palmer, who was captured on picket two or three weeks ago. He is now in Libby Prison, Richmond. We have rumors of a speedy move, but I have received no orders in regard to the hospital yet, though the troops are under orders to be ready to move at a moment's notice, I hear.

August 18. A cool, comfortable day comparatively. I have bought General Zook's saddle cloth which, with a new russet bridle obtained in Washington, sets off my black horse well, and makes him look quite handsome. I get my pay every month now, which is one of the advantages of being detached from the regiment on this kind of service.

August 20. I went down to Bealton Station today, and sent my July pay home by express. While there I fell in with an artist in tintypes, and so had some pictures of my horse taken.

These will be found among my collection of war pictures. On the way back to camp Lieutenant Mitchell of the Ambulance Corps, who was with me, found a pocket-book containing \$75.00 or \$80.00 in greenbacks. He sought, but never found, an owner for it. Calling at one of the houses in our neighborhood a few days ago, one of the women of the household gave me a sample of cloth which she wove, and like which was the dress that she was wearing at the time. It is called "Dixie Gingham," and I sent the sample home.

August 21. Yesterday I witnessed the execution of a deserter in the 2d Division—the first time the death sentence has been invoked in the 2d Corps. It was a melancholy spectacle, but a just way to deal with such dangerous men. We are having quiet times now. The hospital is running smoothly, and the entire command is in very good health. We are beginning to receive some of the fruits of the draft now going on in the North, which will reinforce our thinned and weakened ranks. A motley group of these raw soldiers arrives almost daily, a goodly number which seek the hospital upon the first excuse, and some of them needfully, as they become ill from the change of climate, as well as a radical revolution in their mode of living. The old soldiers are inclined to look with a jealous eye upon these drafted men and substitutes, but I think most of them will make good soldiers after they get tempered to the work.

Monday, August 24. I wrote home today on a sheet of note paper taken from a rebel soldier's knapsack at Falling Waters, where we crossed the Potomac July 14, when we were pursuing Lee after Gettysburg. I have carried it ever since, but did not think to use it until today. It is of a dirty brown color, coarsely ruled, and not very good in quality, yet it answers their purpose just as well, I presume, as though it were made in Belfast. Yesterday was the hottest day of the season, and a julep and an iced lemonade were refreshing. These are luxuries which we can now boast, as I get 150 pounds of ice a day. The consequence is I have plenty of company—visitors who call for a drink of ice-water.

August 28. We are having beautiful moonlight nights now, and every evening a cavalcade of eight or ten officers visits my quarters, when we all go out for a ride, generally taking the Bealton Road; after riding about four miles we all return to my tent, where an hour or two is spent in conversation, smoking, cobblers, etc. Two more deserters were shot in the 2d Division today. The entire Division was drawn up in line, and the doomed men marched to the place of execution behind their coffins, which were drawn in a wagon. The guard detailed for the shooting

made bungling work, which added to the horrifying nature of the spectacle.

August 31. The month closes with quietude, and we are still at Morrisville: I think, however, that we shall not remain here much longer. Things military seem to be pointing to a movement of some kind.

September 1. I hear from home of a visit to my wife by Mrs. Bidwell, which was a pleasant reminder of the winter of 1861-2 at Camp Griffin. The 2d Corps has gone on a reconnoissance to Falmouth, leaving one regiment to guard the camp and the sick. so I am in supreme authority today. Quartermaster Snyder is quite sick in the hospital.

September 4. The Corps returned today, without having met with any special adventures. It seems the purpose of the movement was to aid in the destruction of some gunboats the enemy had placed in the Rappahannock: but I never heard whether the boats were even seen by any man of the command. Dr. Mary Walker rode up to the hospital just at dusk last evening, and I gave her quarters for the night. She appears to be one of those women cranks, who imagine they have a mission to perform in the Army, and so pester the doctors with their care.

September 5. These are quite busy days, as I have several very sick men with typhoid fever, dysentery, etc. I have lost but one patient since assuming charge of the 9th, out of over 150 different patients treated, and now have 65 on hand. I made application last Sunday, the 30th, for leave for seven days to go home to Mary Bostwick's wedding, but, as the Corps moved out on the reconnoissance to Falmouth on Monday and did not return till yesterday, it is doubtful if I get it in season to reach Lancaster by the 9th. The mails come with regularity now which is a great comfort, furnishing letters and papers from home almost daily.

Wednesday, September 9. The supply of ice and lemons is ample, and I am thus enabled to make the men in hospital very comfortable, during this very hot weather. This evening the wedding takes place at home, but I am not there as I hoped to be. This is the lot of a soldier—doomed to disappointment—but if life and health are only spared 'tis well.

Friday, September 11. My leave came last night and I started this morning, reaching Alexandria late in the afternoon, owing to the delay of the train. I engaged a livery man to drive me over to Washington in time for the six o'clock train north, for which he gets \$5.00 if we succeed. On the Long Bridge we met a long train of army wagons which promised, at first, to impede our passage, but, as I happened to have a cavalry sabre with me that I

picked up on the field at Bealton after a cavalry fight, and which I was taking home, it was supposed that I was a staff officer with important despatches, as I waived a large envelope and motioned the train to give way to the left. This the officer in charge readily obeyed. The roadway across the bridge was cleared, and we reached the Baltimore & Ohio depot in season for the train.

I arrived home Saturday evening, the 12th, much to the surprise of everybody, not to say their gratification. On Monday I had a new plate of teeth made by Dr. Theo. G. Lewis, started back for the Army on Wednesday, and reached Washington on Thursday. I remained over Friday, the 18, in Washington to get my pay for August. Friday evening I attended Ford's Theatre, where I met Dr. and Mrs. S. B. Hunt and their son. I sat beside Mrs. Hunt during the play, and had a delightful visit with her. Dr. Hunt has medical charge of convalescent camp near Alexandria, and says he would make me executive officer if my rank was not so high. I could not think of advancing backwards like a crab, even with so tempting an offer as that; for I am well pleased with my present position, and think it is all I deserve at my age. I hear that the 2d Corps has moved out beyond Culpeper C. H., since my departure.

Technic.

By JOHN G. W. KNOLL, M. D., Buffalo.

NEARLY every operator has some original and many acquired methods of preparation, procedure and after treatment. Most institutions have their established technic founded and followed by the prominent and successful men on the staff. The trend of advance in surgery has been rapid and radical during the past ten years, and surgical technic has changed as often as the sun rises and sets. What we adopt as our method today, tomorrow may be discarded. Old methods again take place of the newer ones which have fallen into disrepute for some reason or other. The general trend, however, has been a decided advance particularly along the lines of thoroughness and simplicity. Any one technic is not suited for all operators.

The most judicious plan is to follow a well known and proved technic rather than to change continually to unknown and practically untried methods. The indiscriminate change of instruments, suture material, incision, procedure on viscera and closure without any other reason than to try a new fad, is unscientific, questionable and reckless. The time consumed in performing an operation depends solely upon the anatomic, surgical and pathologic knowledge of the surgeon, combined with experience and a

technic which he has perfected so that not alone is he familiar with all its details, but his immediate assistants know his procedure and methods like a book.

Assistants to the operator should be so placed about the table, some on foot stools, that they are practically out of each other's way and still have a full view and convenient access to the field of operation. Two assistants are usually enough in most any operation. The first assistant's duty is to perform haemostasis, sponge, tie and cut ligatures. The second assistant's work is to see that all necessary instruments are in place and that all soiled instruments and sponges are instantly removed, also to keep the surrounding operative field free from blood as possible, by placing clean sterile towels over the soiled ones. The operator and chief assistant should never under any circumstances take their eyes off the immediate operative field, especially when infective material, pus, fluid from cysts ruptured tubes and gall bladder contents are being handled. The less time consumed in completing an operation, the more rapid is recovery from the anesthetic and shock.

Preparatory treatment to patients who are to undergo major operations in my estimation, is as essential as is the training of an athlete. Some institutions give very little preparatory treatment. A few of our most noted surgeons hold that preparatory treatment is quite unnecessary except in special cases.

The calls upon the heart, lungs, kidneys, digestive and nervous system incident to an operation, are of the most severe character. Poor results and death often follow when these important duties to the patient have been neglected.

When a person to be operated upon is taken away from the dinner table or one whose appetite was assuaged with cheese, rye bread and beer and whose gastronomic history is that of a glutton and within twenty-four hours without any other preparation than a general bath, a dose of castor oil, Tr. Iodine on the abdomen, a hysterectomy or cholecystotomy is performed; very often the undertaker is called in to confirm the prognosis. Besides a urinalysis, blood count and physical examination all patients who are to undergo an abdominal operation should come to the hospital and be placed on a limited diet and give the surgeon several days or sufficient time to note any and all pathologic conditions that may exist.

This brings to my mind a case of uterine fibroid which was to be operated. Four urinalyses were made and reported negative. The fifth specimen showed an abundant amount of sugar. The sixth specimen was again reported negative. We cannot be too careful by whom and how our examinations are conducted. The

most technical skill is sometimes necessary to discover some pathologic conditions which may contra-indicate an operation. Kidney disease, myocarditis and other advanced changes in the blood vessels make operative procedure most hazardous.

While it is necessary to have sufficient and proper instruments, the average operator usually has more for his immediate use than he can possibly keep track of. How often we see the instrument tray and field of operation strewn with all kinds of knives, haemostats and scissors; the operator groveling and spending precious moments searching for this or that particular instrument. Learn to perform your operations with as few instruments as possible. It will not only save much time and eventually develop a good and rapid technic but the dangers of infection are minimized.

The question of sterilizing the hands is as simple as it is efficient: scrubbing with boiled brushes and bar soap, washing in alcohol or sterile water is all that is necessary provided that thoroughly sterile dry or wet rubber gloves are worn. Sterile trousers, shirts, apron and gown with a well fitted mask and mouth gag are the necessary garments to wear in the operating room.

The night before operation, a general bath is given and the point of selection is thoroughly scrubbed and then covered with a plain sterile gauze dressing fastened with adhesive plaster and bandage. This dressing is not removed until the patient is placed upon the operating table when the whole field and for some distance beyond is covered with Tr. Iodine and wiped with alcohol. Now the entire field is covered with large sterile towels except at the point of incision and fastened with towel clips to the skin. The entire patient from the anesthetic frame is covered with a large sterile section sheet with its slit in position.

The selection of a knife is of considerable importance, most knives have a belly, which makes it almost impossible to judge the depth of the cut. A knife with a centered point is ideal and for general work is the most satisfactory. In an abdominal operation, the incision should be carried down to the fascia at once, which is divided exposing the muscular layers, the strands of which are separated lengthwise with the handle of knife or finger. The preperitoneal fat is now separated and when haemostasis is accomplished, the peritoneum proper is picked up between forceps and cautiously divided. The incision can now be enlarged to suit the case, taking care not to injure any of the viscera.

The skin incision should be clean cut and made with one firm stroke. A fact to which I wish to call special attention is that most

operators try to do their work through too small an opening. Remember that a large incision will heal just as readily and completely as a small one, in the same space of time and will give the operator better view of the anatomy and pathology to say nothing of unconstrained manipulation.

After placing a triple self-retaining retractor, the free abdominal spaces are walled off with sterile gauze towels and the flat or Trendelenburg position is assumed as the case may require. The use of many small gauze towels is somewhat annoying as the nurses are obliged to keep constant track. A better plan is to have one or two six yard towels.

The complete procedure in the removal of tubes, ovaries, uterus and appendix, likewise a resection of the stomach or bowels or operations upon the gall bladder and its ducts are not within the scope of this paper and can only be successfully performed by a skilled surgeon who has served his time as an assistant to an operator of ability.

Sutures should be prepared and handled only by persons of technical experience whose training, judgment and ability can not be questioned. The person who handles the sutures and needles must have foresight, be familiar with all operations, and to be valuable must anticipate the operator's immediate wants. The practice of changing suture nurses from time to time to give them experience is not only to be condemned from a surgical point of view but from a legal standpoint; the patient has certain rights which the surgeon must respect. It may be good practice in hospitals to give nurses instructions in preparing and handling sutures as part of their education but it is a mighty risky one to allow this continual change of persons in responsible positions in the operating room.

Closing the incision is an important part of the technic, for upon this depends the functional usefulness, appearance and final discharge of the patient from the hospital. The normal anatomic relations must be perfectly restored in situ, otherwise a most skillful operation upon the viscera will have its halo dimmed.

DRAINAGE. Upon this important part of surgical technic the life of the subject depends.

Only the most experienced surgeon can and is compelled to adopt an immediate procedure. It is a matter of vast importance and nicety of judgment to be able to decide whether or not and with what and how you shall drain. Should the case be a gangrenous appendix with a walled off, pocketed or diffused abscess or are you dealing with an ovarian abscess with mixed infection following parturition or simple gonorrhoeal pus, then

and there you must without reservation decide a perfect method of drainage or closure.

The gauze or Mikulicz drain has its advantages in that if it is properly prepared and placed it will completely so to speak, dry out the pus cavity by capillary attraction from the bottom and then gradually allow the granulations and viscera to bring about a shallow and practically superficial condition. It therefore should be used in deep and extensive cavities where conditions are gangrenous and the infection mixed.

The rubber drainage tube outside of gall bladder and duct work and possibly in the cul de sac abscesses where its office is simply to carry off material favored by the forces of gravity, is not only useless but absolutely dangerous. For example: Take a gangrenous appendix with a large pus cavity. The cavity must naturally fill itself completely before the pus begins to run out of the tube. You therefore have at all times a cavity of pus in situ. Rubber tissue and combination rubber tissue and gauze or cigarette drains are principally placed in the angle of an incision where the conditions were sterile to allow superabundant serum to escape, and sometimes as a safety where infection is suspected.

The suture material used in visceral and closing up technic should be well tried and tested. Whether continuous or interrupted stitches are used will depend upon the skill, judgment and experience of the operator.

The plan generally followed at the German Deaconess Hospital by the surgical staff is to use plain, fine catgut continuous for the peritoneum and muscular layer; double Iodine catgut continuous for fasciae, silkwormgut sub-cuticular or occasionally through and through figure of eight at angles of incision for the skin, where the structures are thick, gaping and the incision rather long.

The use of silk and linen boiled in 5% Carbolic the night before the operation and again just before using have given entirely satisfactory results in visceral and superficial work. Fine plain catgut to tie off small blood vessels and heavy Iodine for larger vessels and broad ligament work are all that is necessary.

The after treatment which essentially commences with the first dressing and which should be as simple as possible: twenty or thirty layers of plain sterile gauze after the immediate field has been wiped with Hydrogen peroxide and dried with a sterile towel and held down firmly with Z. O. adhesive plaster and then covered with several layers of absorbent cotton and bandages.

When the patient has been placed in bed, abundant warm bed clothes and hot water bottles should be placed along trunk and

at the feet until circulation and respiration have become re-established.

A nurse should be in constant attendance to guard and watch the patient until normal consciousness has entirely returned.

The shock, vomiting, suffering of pain and restlessness are sequelae which follow abdominal operations. Pain is relieved with hypodermics of morphine, P. R. N. Shock, weak pulse, with camphor and oil. During the next three days, the patient will have a rather unpleasant time between pain from gas distention and surgical peritonitis. All of these disagreeable conditions can in a measure be alleviated. Allow the patient to roll gently from side to side, flex the lower limbs and occasionally brace and raise head and back with pillows. An enema of sterile salt solution and turpentine with a high rectal tube will occasionally afford much relief from pain and gas. The practice of allowing the patient to lie flat upon the back after an abdominal operation for several days is not only very uncomfortable but the accumulation of fluids in one place in the abdominal cavity is a good focus for infections and adhesions. Besides the distribution of fluids over a large surface gives the peritoneal vessels a wider area of absorption. This occasional shifting of the body from side to side also equalizes the circulation. After the effects of the anesthetic have worn off and the patient has not vomited for eight hours, weak, hot tea and small amounts of pure water can be given.

Forty-eight hours after the operation, I give Calomel gr. $\frac{1}{4}$ each hour until eight doses have been taken and twelve hours later follow this with a normal salt enema. This is most always followed by several good sized semi-liquid stools with complete relief from pain and meteorism.

It is the duty of the surgeon and a pleasure of a conscientious one to visit his patient at least twice daily for the first four consecutive days following major surgical operations, and besides the house surgeon should see the patient morning, noon and night and any untoward complication should be reported to the surgeon in charge at once.

Specific written orders should be left with the nurse in charge whose duty it is to see that they are carried out to the letter. The most gentle and kind decorum is necessary on the part of the nurses to patient, combined with a prompt service. Any hospital or institution which cannot guarantee these services has no moral or legal right to receive patients either for surgical or medical treatment.

The duties of the hospitals do not cease in all of the above cares but they must engage the services of a competent Pathol-

ogist of unquestioned ability and whose duty it is to assist the surgeon to discover all pathologic conditions ante and post mortem in all cases which come under their observation.

Some surgeons go so far as to state that the outcome or prognosis of a surgical operation is decided upon the operating table. While this in a measure may be true I must disagree that such is not the case in all operations. I have seen a post operative case where the surgeon in charge did not know that the patient's bowels had not been moved for ten days following the operation. This patient died and whether this intestinal condition was the cause of death or not the fact remained. No effort had been made for ten days to move the bowels and all subsequent efforts were futile.

Surgical Technic is then combined knowledge of anatomy, surgical and pathologic; simple and perfected methods of procedure, absolute personal cleanliness as well, sterile instruments, suture material, operative field and dressings, associated with these, proper preparation and other treatment spell success. With these it may well be said, that cleanliness is next to Godliness.

The Athenian Epidemic of Meningitis of 1911.

CONSTANTINUS M. MERCURIUS, M.D., in the *Medical Progress (Hiatrike Prohodos)*, of August, 1911. Specially translated for the BUFFALO MEDICAL JOURNAL from the original Greek.

In the current epidemic of cerebro-spinal meningitis, beginning suddenly in the month of January, already disappearing, about 20 patients were entirely under my care or were seen in consultation. Thirty other indubitable cases occurred among the approximately 18,000 inhabitants of the two neighboring Athenian districts, Cropia and Thoricii. The present article deals only with the 20 personally seen. (Note: We have taken the liberty, occasionally to condense and to make a free translation.)

Of the 20 cases, 13 were females, only 7 males, 2 died of each sex—28 per cent. males, 16 per cent. females. According to age, the incidence and mortality were as follows:

3 months—1 year.....	3 cases 1 death
1—3 years.....	4 cases 1 death
3—10 years.....	3 cases 1 death
11—19 years.....	9 cases 0 deaths
35 years.....	1 case 1 death

CAUSE AND ORIGIN.

Local causes. The exceptionally severe preceding winter with frequent and persistent rains is noteworthy. Nor can the opinion

as to the influence of cold and dampness on recrudescence and communicability be ignored.

General causes. 1. In all of the 20 cases, the houses were near the ground. 2. In two-thirds of the cases, the houses were damp, badly ventilated, dark, and had narrow and filthy halls. 3. The first three conditions were noted in the remaining third.

Transmission and Prophylaxis. Quarantine was enforced from beginning to end of all cases. Immediate contagion did not occur. Two critical cases in the same house broke out at the same time. Thymol mouth washes, borax and menthol ointment for the nostrils, especially for fissures of the mucous membrane or skin, sacks of naphthalene suspended from the neck, were employed.

Peculiarities. In a girl of three, the disease ran like a thunderbolt to a fatal issue. In the three other fatal cases, there were already anaemia and cachexia from chronic malaria and the intercurrent meningitis was severe. However, death was delayed by the specific serum and occurred in coma, without fever, after the maintenance of a normal pulse for a considerable time.

Symptomatology. The inception was almost always violent, with the classic tripod of symptoms and for the most part, without antecedent nasal catarrh. The fever was always high, exceeding 39 (102.2 F.), sustained in the beginning, then intermitting and rising again in the beginning, then intermitting and rising again in the evening after a lapse of 8—10 days. The pulse was from 80 to 130, in one case maintaining a rate of 150 or more persistently till convalescence. Slow pulse did not occur once from compression. **Spasm of the masseters** was observed in only two cases.

The signs of Kernig, Babrosky and Brudzinski were present in all cases. Labial herpes was found in 80 per cent. of cases. In an 18-year old girl, it was accompanied for the first few days, before any injection of lymph, by a **severe albuminuria**—10—12 grams a day—with epithelial casts, corresponding to the exacerbations of the fever and disappearing almost exactly at the time of defervescence. To the renal condition, I ascribed the marked rapidity of the pulse, the subacute pulmonary oedema and the protracted digestive disturbance which complicated the case.

Treatment. 1. As a routine, leeches were applied over the mastoids, at the beginning of the disease. Headache, delirium and digestive disturbances were relieved and the pulse became regular. Most drugs given by mouth, including bitter cathartics, and enemata of sodium sulphate, were usually rejected. Spinal blisters were not used. Intra-spinal injections of electrargol seemed to be of some value. Crede ointment did not hit the

mark, though used perseveringly in the protracted cases. I regard this remedy as something to be dropped from the category of therapeutic measures against meningitis. The moderate, rational use of lukewarm baths, carried out under the physician's supervision, greatly relieved the suffering. The application of ice and salt to the head, by a bag and along the spine by a rubber cylinder, acted well.

2. Three forms of anti-meningitic sera were employed. That of Dopter-Pasteur, succeeded in recent cases in accomplishing a cure in the shortest time. Injected intra-spinally, in a three-year old boy, within 36 hours from the inception of the disease, in 10 c.c. dose, it completely removed the symptoms in a period of scarcely four hours. Six to eight doses, during a week, brought the cases to recovery. In the severest cases, it reduced the temperature to normal but did not save the patients.

The Merck serum also demonstrated its efficacy, quickly controlling the symptoms in a three year old child, in 10 c.c. dose, on the fourth day and producing a cure in 12 hours. The best result was obtained by the preliminary withdrawal of a considerable quantity of endo-cranial liquid, about double the bulk of the serum to be injected. For instance, in an 18-year old youth, 15 c.c. were withdrawn, 10 c.c. of serum injected and the advantage was quickly shown. But, on account of the accompanying nephritis and continued rapid pulse, the three forms of sera were tried, to the amount of 80 c.c. altogether. The case finally recovered after a month and a half. The specific treatment merely mitigated the symptoms and various adjuvant measures were of little effect so that we lost hope. Finally, Merck's iodipine cut short the apparently endless course of the disease. We began the use of this drug empirically in the minimum dose of 5 c.c. The case defervesced and other symptoms disappeared in 48 hours. Whatever headaches and minor rises of temperature reappeared, were easily controlled by tablets of iodipine and no further medication was found necessary. There was no preconceived prejudice in favor of this drug. It proved absolutely harmless, not causing renal complications, so that there is nothing to contra-indicate its wider use.

Among the cases of recovery, there remained no limited paralyses, local atrophies nor alterations of the special senses.

(NOTE. It may be of interest to note that Greek is by no means a dead language. While the pronunciation has changed materially and there have been various minor changes, the written language is essentially the same as it was 2,500 years ago. Imagine a German, who had studied Chaucerian English as a mat-

ter of grammar and translation in school, who had become extremely rusty on this slight knowledge of English and had then attacked a modern English medical article. The latter would be almost unintelligible, yet there is a difference in time of only about 500 years. Indeed the English language is scarcely 700 years old altogether.)

SOCIETY PROCEEDINGS

The Medical Society of the County of Erie, February 19th

Dr. Julius Y. Cohen and Dr. Clayton W. Greene were elected to membership.

Dr. George E. Stilson, formerly of 438 Potomac Avenue, Buffalo, but now residing at Niagara Falls, was granted a transfer to the Niagara County Society.

The amendment regarding contract practice was reported by Dr. Wisner R. Townsend, Secretary of the State Society, as disapproved in its present form. The entire question was referred to the Committee on Contract Work.

Dr. William H. Thornton moved that a committee of, at least, five members be appointed by the President to take into consideration the establishment of a collection department for our society and that the President and Treasurer be two of its members. The President, later, appointed, as such committee, Dr. William H. Thornton, Chairman and Drs. F. W. Filsinger, E. L. Frost, H. K. DeGroat, Treasurer A. T. Lytle and President T. H. McKee.

A memorial on the death of the late Dr. James S. Smith, presented by Dr. W. T. Getman of the Committee on Necrology, will be found in the Obituary Department.

Scientific program:

"Hemorrhage and its Treatment," by Dr. F. C. Busch

"General Conditions in the Treatment of Surgical Tuberculosis with Tuberculin," by Dr. Norman K. McLeod.

"The Pictorial Accessory Cavities" (illustrated by Stereopticon), by Dr. George F. Cott.

The Surgical Section of the Rochester Academy of Medicine

Met February 14, 1912 at the Genesee Valley Club. Dr. Thomas S. Cullen of Baltimore discussed Diseases of the Umbilicus, other than Hernia; his brother Dr. Ernest Cullen of Detroit, spoke on the Test of Renal Function in Surgical Disease of the Kidney.

The Elmira Academy of Medicine

At a recent meeting, held that the fixed fee of \$10 for examinations in lunacy was often inadequate: the lack of economy

of maintaining duplicate telephone systems was also discussed and a committee was appointed to consider both problems.

NOTE: Owing to the occasional necessity of revising programs, postponements at the convenience of speakers from out of town, change of usual meeting place, etc., it seems best to discontinue the practice of publishing announcements in advance. The Buffalo Academy of Medicine holds meetings as a rule, on Tuesday evenings, in the Public Library Building: The Rochester Academy of Medicine on Wednesday evenings, at the Hotel Seneca; The Elmira Academy of Medicine on Tuesday evenings. Visiting members of the profession are welcome. We shall try to secure general notices of times and places of meeting for all public medical organizations in western New York for publication in the September issue, which should then be filed for reference.

The Buffalo Ophthalmological Club

Celebrated the 10th anniversary of its organization with a banquet at the Saturn Club, Saturday evening, February 17th.

The Ophthalmological Club was formed ten years ago with thirteen charter members, all from Buffalo. Since that time nine new members have been added from this city and seven from neighboring cities in western New York. Three members have died: Dr. Frank H. Coyle of Hornell and Drs. Julius Pohlman and Alvin A. Hubbell of Buffalo, leaving a present membership of twenty-six. The Club meets once a month with a very high percentage of attendance. Cases are presented, papers read and discussed and several prominent ophthalmologists from other cities have presented papers at various times.

Nearly the full membership was present at the banquet, at which Dr. Lucien Howe presided as toastmaster and the following formal toasts were responded to: The Dark Era. Pre-Ophthalmologist Club Days, by Dr. B. H. Grove; The Dawn of Buffalo Ophthalmologist Light, by Dr. Elmer Starr; Foreign Relations, by Dr. George Blackham of Dunkirk; Ideals for the Future, by Dr. F. Park Lewis; The Vacant Chairs, by Dr. Arthur G. Bennett; and Reminiscences by Dr. Henry Y. Grant. All the members present participated in the festivities of the occasion.

TOPICS OF PUBLIC INTEREST

The Tuberculosis Department of the Erie County Hospital

AFTER careful consideration by a special committee of the staff, this department was organized at a meeting of the staff, Feb. 5, 1912. For the present, there will be a head nurse and two

assistants, with temporary assignments of pupil nurses from the main hospital; two internes, each acting as assistant and as chief, for three months each service; six attending physicians, two on duty at one time, for services of four months, each being required, personally or by assistant, to make visits at least three times a week; the whole being under one executive physician who shall visit the hospital at least twice a week. Attendants may or may not be members of the general staff but shall not serve on the general staff at the same time as in this department. Various details of management are provided for and a general provision for co-operation with the officials of the main hospital is made.

Public Health and Marine Hospital Service

AN examination of candidates for the position of assistant surgeon will be held in Washington, April 8, 1912. Details will be furnished on application to the Surgeon-General. This is, in many respects, the most desirable of the government services, for three reasons: officers are on duty mainly in large cities; they deal with actual patients instead of soldiers or sailors furnishing little clinical material except in venereal practice; except at the beginning, officers are not under direct supervision of superiors and, throughout, their superiors are professional colleagues. Counting quarters or allowances for quarters where none are provided, the pay amounts to about \$2,000 a year at the beginning and is advanced progressively to about \$4,000 in twenty years, with a chance for further promotion for a smaller number, of especial fitness.

"The Monroe county laboratory was established, practically doing its first year's work in 1910, and has now completed its second year of 1911, with the very creditable record that is shown in the table. In the case of Monroe county, no proper laboratory quarters have been provided and no laboratory equipment, but an exceedingly minimum salary has been paid to a practicing physician in Rochester, who has provided the necessary equipment himself and done the work of the county laboratory, as well as could be expected with such half-way compromise. The personality and quality of the bacteriologist in this case has been of the highest class, and it is due to unusually well directed effort on his part that so creditable a showing has been made. "It is learned, however, that the services of this highly qualified and proven bacteriologist have now ceased and that a new man has taken over the work under similar conditions of private contract."

Bulletin State Dept. of Health.

COURSE of lectures in the out-patient hall of the N. Y. Skin and Cancer Hospital Wednesday afternoons, March 13, to April 17, at 4.15 o'clock. Diet and Hygiene in Diseases of the Skin, Dr. Bulkley.

April 24, Some Recent Methods of Treatment for Malignant Diseases, Dr. Bainbridge.

Each lecture will be preceded by a half hour Clinical Demonstration of various cases.

The lectures will be free to the Medical Profession, on the presentation of their professional cards.

IN New York City, during 1911, 423 persons were killed and 2,004 injured by traffic. For 1910, the figures were: 376 and 930. Contrary to popular belief, automobiles do not kill as many persons as wagons—142 against 172. Nearly half—60—automobile homicides were attended with escape of the chauffeur. In this connection it may be noted that for several years, the number of persons killed in and by automobiles is approximately equal to the number killed by railroads and trolleys, for the whole country.

AMBROSE MOORE, who died Feb. 13, 1912, at his home in Mt. Carbon, Pa., aged 40, of kidney disease, weighed 525 pounds, and had a waist measure of 5 feet. From Bridgeport, Conn., comes the report of a death ascribed to excessive adiposity. Within a couple of years, the patient had increased from "slight build" to nearly 400 pounds.

AN Atlantic City man, 5 feet 6 inches tall, has just died, weighing 530 pounds. Ten years ago he weighed 143.

THE best and largest library in the world, devoted to a single subject, is that of the Surgeon-General of the U. S. Army, which began with a small collection by Surgeon-General Lovell prior to 1836 but owed its existence on a large scale to Dr. John Billings in 1865.—(F. J. Haskin, *Buffalo Commercial*).

THE Rochester Common Council, with the approval of the Public Health Association, is considering an ordinance against the public cup and towel.

CORRESPONDENCE

To the Medical Profession:

Dear Doctor:

You are probably familiar with the action of the Bell Telephone Co. in arbitrarily reducing commissions for booth space

and service from 40 per cent. to 10 per cent. cancelling our contracts and removing telephone booths, because we would not meekly toe the mark.

The Bell Co. gives less and receives more than the Frontier Co. all along the line, for the Bell charges a guarantee of \$65.00 per year, the Frontier only \$48.00

The Bell Co. charges 5 cents for each outgoing message, the Frontier installs desk phone with free service, Bell Co. is trying to force us to sign a 10 per cent. contract for both space and service, while the Frontier gives 40 per cent. and says it is well worth it.

Now as professional men who are in close touch with us, we ask your co-operation and advice in this fight, for we realize that you are a power both as to personal influence and also in regards numbers. So if as individuals or through your associations, you are able to bring some pressure to bear on the Bell Telephone Co. your friendly offices would be surely appreciated by all Pharmacists in New York State for New York City and Rochester are going through a similar experience and are doing all in their power to resist the unjust demands of this telephone corporation.

We remain, yours truly, Special Telephone Committee,

S. A. GROVE, Chairman,

F. W. BUSCHE,

CHAS. H. DERR,

J. S. GREEY,

Feb. 9, 1912.

Editor BUFFALO MEDICAL JOURNAL:

Dear Doctor:

In the February Journal, page 412 I notice your comment that "it is doubtful if any Sons and Daughters (of the Revolution) in the literal sense survive."

I beg to say that Samantha Stanton Nellis of Naples, N. Y., is a real Daughter of the Revolution and still living, having celebrated her 102nd birthday January 5th. Her father Elijah Stanton was born in 1754 and the Stanton family and the Washingtons being close friends, the boy Elijah enlisted as the boy servant of Gen. Washington with whom he served until the close of the war. In 1791 he married Lucy Goodell and their home was in Fairfield, Herkimer Co., where their ten children were all born. Among these ten were Daniel, my grandfather, born April 13, 1807 and Samantha born January 5, 1810. Elijah died at the age of 103. Although I am not prepared to give you

other names, I have reason to believe that a considerable number of real Daughters of the Revolution still survive.

Very truly yours,

WM. STANTON.

Univ. of Buffalo, 1889.

WE are glad to be corrected. Mrs. Sarah Bishop Carl of Pekin, Niagara Co., aged 88, has recently been mentioned in the Buffalo Express as a real D. A. R. The moral is that, sometimes, it is better not to reply on "authority" but on one's own observation. For example, the writer's great grandfather, born 1760, had a child by a second wife in 1840. This child died before its father but among the large number of boy soldiers of the Revolution, themselves born in 1760 or a few years later, quite a number must have had children at ages between 60 and 80, that is, between the years 1820 and 1845. Of these there should still be a goodly number of survivors.

To the Editor:

In the efforts that are being made to protect the babies from milk-borne diseases such as tuberculosis, typhoid, scarlet fever, diphtheria, etc., the well considered policy of the Public Health Service and of the foremost health officers of the country is seriously hindered by attacks based upon ignorance.

The statement is made that the use of pasteurized milk causes rickets, scurvy and anaemia.

In feeding 25,000 babies with pasteurized milk through my infant milk depots in New York City alone, never has one case of scurvy or rickets developed. Dr. Variot, in Paris, fed 13,000 babies on sterilized milk without causing these diseases.

In order to bring this issue to an end, I offer through you \$1,000 for any case of scurvy or rickets or anaemia caused by feeding a baby with properly pasteurized milk.

If any such case is alleged in answer to this challenge, I will leave the determination of the facts to Dr. Rupert Blue, Surgeon General; Dr. M. J. Rosenau, Professor of Hygiene and Preventive Medicine at Harvard, and Dr. John F. Anderson, director of the Hygienic Laboratory at Washington, or any jury that they may choose.

Very sincerely yours,

NATHAN STRAUSS.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

Subscriptions may commence at any time. \$2.00 per year in advance.

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MARCH, 1912

No. 8

"LEST WE FORGET." The editor receives many kind words of congratulation on the growing usefulness of the BUFFALO MEDICAL JOURNAL. He will try to merit these compliments and, indeed, is incurring the risk of an intestinal diverticulum from the effort put forth. But, let us not forget the very loyal assistance, in many ways, of named and unnamed collaborators. And let us not forget the gallant veteran who spent so many years of his maturity in the task begun when he was older than the present editor and who kept up the work at an age and under stress of physical suffering, which would drive most of the younger generation into retirement. Col. Potter directed the JOURNAL even from his death bed, with skilled and loyal assistance, it is true, but putting his own personal seal upon the last number, issued during his life time, a year ago. One of the most touching episodes in his long and varied career, was the almost paternal eagerness with which he took into his hands, the March 1911 copy, fresh from the press, knowing that it would be the last of his literary offspring and having, indeed, scarcely hoped to survive till it should arrive. We are fortunate in being able to present, for several issues to come, his memoirs of the Civil War which he had prepared for posthumous publication and whose value will be as high in the distant future, as at present, when everything else in the volume will have been superseded by technical knowledge and professional issues which we cannot even imagine.

OUR CONTEMPORARIES

THE KETTLE GETS BACK AT THE POT.—The *Journal of the A. M. A.* pays us a very handsome compliment for our reading matter, while protesting against our carrying the advertisement of Duffy Malt Whiskey which is said to be advertised as a consumption cure. Our readers will note that the advertisement which we carry, as well as those of the other journals criticised, so far as we have been able to consult them, are perfectly proper, conservative statements of generally accepted alcoholic therapeutics. Under ideal conditions, alcoholic beverage should be used only as drugs or adjuvants and should be advertised only in medical journals. Under existing conditions, they are not so used and we cannot refuse properly worded advertisements of reputable firms on the basis of lay advertising, any more than we can those of manufacturers of soaps, foods, or strictly commercial wares. The *British Medical Journal* has, we are informed, accepted the Duffy advertisement after investigation. The only advertisement of this firm that we have found among many newspapers and magazines, is one advising, at the beginning of a cold, to go to bed and take a hot lemonade with a small quantity of whiskey (Duffy's of course.) This is generally accepted advice and comes well within the field of domestic therapeutics.

But we have found that the *Journal of the A. M. A.* carries advertisements of medicinal soap, foods, beverages, cod liver oil, etc., which are advertised to the laity—not to go back beyond the very recent ethical advertising code of that Journal. There is no difference in ethics that we can see between advertising whiskey as a consumption cure and advertising another milder beverage as "a true tonic without an evil aftermath," or advertising cures of skin diseases, or dwelling on the nutrient wonders of prepared foods which the profession employs in feeding delicate infants, serious digestive cases, etc. As to cod liver oil, the advertisement which the *Journal of the A. M. A.* displays so conspicuously and which is essentially duplicated in a number of popular magazines, does not mention tuberculosis but it does not need to. The laity associates this disease and this food—or drug—without present instruction.

Just as a matter of interest and not as an expression of personal opinion nor as an endorsement of the policy of advising lay use of medicaments even on a basis of fact, we would recall that it is not many years since alcoholic beverages were pretty generally regarded by the profession not merely as adjuvants in diet but as distinctly curative in tuberculosis.

In the last six months, we have sacrificed about \$200 worth of advertising on ethical grounds, but we cannot place nice ethical distinctions higher than common honesty in fulfilling business contracts. The *Journal of the A. M. A.* has a support which is practically unlimited, independently of advertisements. It is making a large annual profit, both from advertisements and from the dues which are considerably more than are necessary for the maintenance of the organization and its publications. An independent journal, on the other hand, is supported mainly by its advertisements. Notwithstanding this fact, we may say that our policy in regard to the *BUFFALO MEDICAL JOURNAL* is precisely the same as in regard to practice of medicine. If it cannot be maintained ethically and on a satisfactory plane of professional usefulness, it will not be continued. Fortunately, there is no prospect of failure; on the contrary there has been an increase of professional and business support which warrants full confidence in an indefinite term of usefulness.

Not to dodge an issue, however, we may say that a periodical is a public institution. It is impracticable to make everything in it, in every department, conform to our own or any one else's views. To do so would be contrary to the spirit and probably, the letter of the law, if anyone chose to contest the point. In making this qualification, we wish to guard explicitly against its interpretation as a disposition to violate principles of right and wrong or even of ethics in the broad sense.

READ the true story of the "Man in the Iron Mask" in the *Maltosia Monthly* for Jan. 1912.

THE *American Journal of Clinical Medicine* for Jan. begins its nineteenth year auspiciously. Dr. Thomas E. Moss of the Philippines describes an operation for vesical calculus, upon a Kalinga chief and gives an interesting description of the country, with pictures. Many other interesting articles appear.

THE "Bloodless Phlebotomist" contains a case report by Dr. S. A. Keene of Baltimore, in which an application of antiphlogistine removed many small shot, facilitated the subsequent extraction of others, and reduced inflammation. Various other reports include favorable results in pneumonia, mastitis, tuberculous glands (by inducing hyperaemia), pleurisy, lumbago, joint effusions, etc. In this connection we may mention a case of long standing facial wen, deeply seated, as large as a pea, which

disappeared after a few applications of antiphlogistine and has not reappeared in five years.

THE *Medical Times* of New York, so long under the able management of Dr. A. K. Hills, and to whose editorial section, we contributed occasionally, for fifteen years, begins Vol. 40 with H. Sheridan Baketel, A.M., M.D, as editor We extend our best wishes and congratulations on the excellence of his first number to Dr. Baketel.

PERSONAL

DR. M. A. KING of Rochester, has moved from 80 Clinton Avenue, South to 21 East Avenue. Office hours, 1 to 3 and 7 to 8.

DR. G. A. HITZEL of Buffalo, has recently been elected to a fifth term as President of the German-American Alliance.

DR. RALPH ROBINSON, Health Physician of Lackawanna, has recently recommended the appointment of a salaried nurse to look after the 1,300 school children of that city.

DR. W. A. MACPHERSON is agitating the establishment of a hospital for the Tonowandas, estimating that \$75,000 is spent annually for the care of Tonawanda patients in Buffalo hospitals.

DR. WILLIAM B. BARTLETT of Castile is Captain of the Castile Sportsman's Club.

DR. F. E. FRONCZAK of Buffalo, delivered an address on tuberculosis at the East Side Business Men and Taxpayers' Association meeting, Feb. 6.

DR. LUDWIK SCHROETER of Buffalo, is going abroad for a number of months.

DR. ANNA LOUISE STRONG has recently visited Buffalo for the purpose of planning the Child Welfare Exhibit which will be held in Convention Hall, May 27—June 3.

DR. GEORGE A. STESEL of Buffalo, has resigned as probation officer of the juvenile court, on account of the recent ruling requiring the devotion of the entire time to the duties of the office—at a salary of \$1,200. (This reminds us of the time when we resigned as city physician, after having earned the whole year's

salary in a month and having made about 300 vaccinations for good measure. The Overseer of the Poor telephoned to see if anything he had done had given offense. He was one of the kindest-hearted men that ever lived, but he could not think of any other reason for the resignation.)

DR. BERNARD COHEN has removed from Niagara St., to 568 Lafayette Avenue, Buffalo.

DR. J. H. GLASS of Utica and Dr. G. Alden Blumer of Providence, R. I., sailed Feb. 3, for Panama and Central American ports.

DR. J. G. KILBOURNE of Utica sailed for Panama Feb. 21.

DRS. FREDERICK R. FORD and F. H. Peck of Utica sailed Feb. 24, for a six months' trip to Europe, their itinerary including Paris, Munich, Vienna, Dresden, Berlin, Rotterdam and London.

DR. F. H. PECK of Utica has recently been elected President of the Yahnundasis Golf Club.

THE editor acknowledges with thanks the hospitality of Dr. Charles W. Hennington and the courteous and patient attention of the Rochester Academy of Science, Feb. 12.

DR. JOHN M. SWAN, formerly of Philadelphia, and lately Superintendent of the Glens Springs Sanitarium, has re-entered private practice at 403 Park Ave., Rochester.

DR. C. C. SUTTER has also recently come to Rochester from Watkins and has located at 275 Alexander St.

DR. C. F. CHAFFE has been appointed County Bacteriologist of Monroe Co., the laboratory being located at 275 Alexander St, Rochester.

DR. CARL VON NOORDEN of Vienna has been engaged by the N. Y. Post-Graduate Medical School for a series of lectures on metabolism, to be delivered in October, 1912.

DR. DEWITT G. WILCOX of Boston, formerly of Buffalo, has been appointed to the editorial staff of the New England Medical Gazette.

T^r. GUILFORD SMITH, LL.D. of Buffalo has completed his term of office as Regent of the University of the State of N. Y. and has been succeeded by Hon. Adelbert Moot of the same city. Hon. Lucius N. Littauer of Gloversville has also been elected to succeed the late Lucian L. Shedden.

DR. H. L. SPOUL of Corning has recently had an unusual interference with his practice. His office is up-stairs in a business block and workmen, repairing an adjoining building took down the only stair case, marooning the doctor in his office. He escaped by way of the roof but, for some time, his office with its equipment was inaccessible.

DR. IRA W. LIVERMORE of Gowanda, returned Feb. 10, from a business trip to Alabama.

DR. C. H. THOMAS of Silver Springs, has gone to Pine Bluff, N. C., for the rest of the winter.

DR. MARSHALL CLINTON of Buffalo, is taking the Panama trip.

DR. MICHAEL A. CONBOY, P. & S., Baltimore, 1901, formerly located at Holyoke, Mass after devoting considerable time to post-graduate study, has opened an office at 482 Delaware Ave., Buffalo. Practice limited to eye, ear, nose and throat.

DR. GEORGE D. STILSON has removed from Buffalo to Niagara Falls.

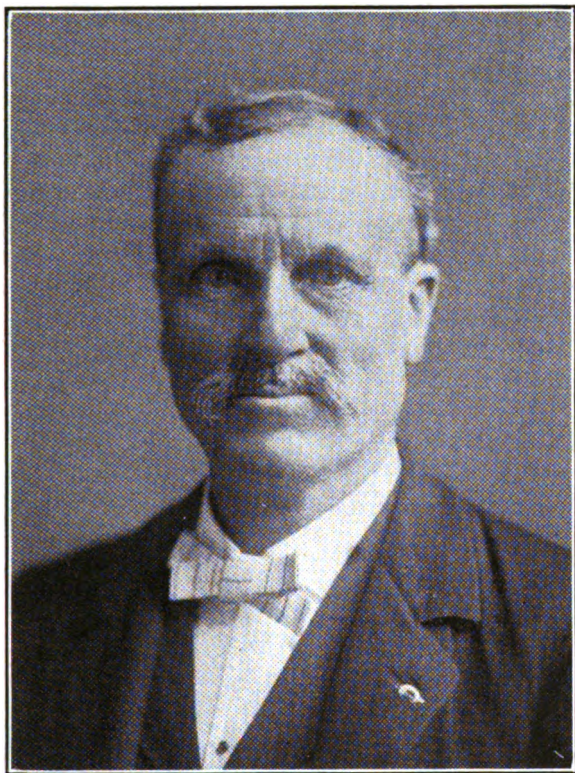
DR. WILLIS B. GIFFORD of Attica, was elected President of the New York State Homeopathic Society, at the convention in Albany, in February.

DR. WILLIAM S. MCGILL, the director of the State Hygiene Treatment and Animal Experimentation on Feb. 15. This address constituted one of a series on Popular Medical Topics given by the Monroe County Medical Society.

DRS. REGINA FLOOD KEYES and MABEL FLOOD have returned from Panama.

OBITUARY

"Dr. James Sadequist Smith, who died January 30th, 1912, was born in Smithtown, near St. John's, New Brunswick on December 6th 1831. After receiving his degree at the University of Buffalo, 1852, he went into partnership with Dr. Milton Potter, and for a number of years was on the obstetric staff of St. Mary's Infant Asylum on Edward Street. With the excep-



tion of this obstetric work, he devoted his time to general practice.

About 1870, he contracted pulmonary tuberculosis and, for a number of years, was considered to be in a dangerous condition, but, thanks to a natural vitality and an out of door life, he recovered his health and resumed his practice.

He was a member of the Erie County Medical Society, Academy of Medicine, Queen City Lodge of Masons and Commandery.

He served as Assistant Surgeon and Surgeon of the 65th Regiment, and as 4th Brigade Surgeon with rank as Major, and brought up his son, Lt. Col. Eugene A. Smith, M. D., with a love of military service and rifle shooting.

Dr. Smith built up a large practice and was a busy man, but was never too busy to stop and chat with his friends for whom he always had a smile. He was courteous and affable to all, and will be long remembered and missed among his patients and medical associates."

OUR thanks are due to the *Buffalo Express* for the use of the picture of the late Dr. Smith.

OUR readers are requested to send notices of deaths of physicians in western New York, or who have resided elsewhere but have been graduates of schools of this region or who have otherwise been identified with this region. State residence, date of death, age, cause of death, school of graduation, and other items of interest.

DR. WILLEY J. P. KINGSLEY, of Rome, died Jan. 26, aged 82. He was a graduate of the N. Y. Medical College, 1855. In 1895, he was Mayor of Rome.

DR. WALTER W. JOHNSON of Rochester, died Jan. 26, aged 83. He was graduated from the N. Y. Homeopathic College in 1887 and was a charter member of the Roentgen Ray Society of America.

DR. WILLIAM ASA WHEELER, died at his home in Portland, Me., Jan. 20, aged 58. He was a graduate of the Medical School of Maine, 1876 and of P. & S. 1877. For some years he was an officer of the U. S. Marine Hospital Service. He was formerly Professor of Surgery in Niagara University, and later, President of the Portland Board of Trade.

MR. PHILIP KUHLES, who has had the longest service in pharmacy in western New York, died in his home at Lackawana, Feb. 12, 1912, aged 67.

In the February issue, we noted the death of a medical hero. Dr. Simon, of Zurich, who died from septic infection incurred in laboratory investigations. On Feb. 12, Dr. G. Armeauer of Christiana, Norway, a biologist and the discoverer of the lepra bacillus; long in charge of the leper hospital at Bergen, died. He was no less a hero because death was not due directly to the

hazards of battle against disease. And here follows what is perhaps still greater heroism: Dr. Mary Baldwin, who had devoted her life to "mute, inglorious" service to the poor of New York, without hope of fame, beginning at a time when merely to be a woman and a doctor of medicine, betokened heroism, was found, a few weeks ago, old, sick and starving, in a wretched room on the Bowery. She was taken to the city hospital on Blackwell's Island, died Feb. 12, aged 76 and her body lay among the unclaimed pauper dead at the morgue. A PAUPER, mind you, this woman, who had given her life work to the people; who had donated technical skill who had repeatedly incurred risks of all sorts and had suffered physical exposure. Yet there is a comfortable, indoor form of philanthropy, requiring no expert training, for which fair, if not generous salaries are paid. One need not expect gratitude, nor the ability to make its gratitude practical from the class to which this professional sister devoted herself, but it does seem as if, from the vast amount of money spent in charity, a few dollars might have been spared to have given this charity worker, a death bed and a grave free from the inevitable if not entirely logical stigma of pauperism. The public owes a debt to such as this woman, a debt which is not paid by the routine relief afforded to the proletariat. But, let us not forget that the organized medical profession is receiving from its individual members, and by its legitimate earnings as a corporation, somewhere in the neighborhood of a third of a million dollars a year. Should we not set aside a small part of this for the care of worthy and unfortunate colleagues?

LORD LISTER, was born April 5, 1827. He took his degree in arts at the University of London, in 1847 and his medical degree in 1854. He attained eminence as a surgeon in Edinburgh and later in London, and was surgeon to Queen Victoria. He was made a baronet in 1883 and was raised to the peerage as the first Baron Lister, in 1897. He was born of Quaker parents, received his early training at the School of Friends, and was throughout his life, a member of the Society of Friends. He died without heirs, Feb. 11, 1912, aged nearly 85. While it cannot be claimed that he either discovered bacteria nor recognized the relation of certain bacteria to pathologic processes, nor even that he was alone in the early recognition, of the necessity of cleanliness and of chemic assistance in preventing sepsis, it may fairly be claimed that modern surgery owes to him the conquest of sepsis and, hence, its possibility of development in directions and to a length otherwise impossible. His comprehensive grasp of the practical importance of pyogenic germs, his reduction of the problem to a definite

means of solution, his elaboration of a practical system, his general surgical skill, scientific and literary ability, and later, his well earned prestige, enabled him to bring about convincing results. We do not overlook the fact that in details, his methods were, especially in the beginning, cumbersome and somewhat dangerous. For years "Listerism" was the subject of attack by those who had simplified antiseptic methods while a long battle has been waged between adherents of antiseptics and of asepsis which is now just about at its conclusion, as the result of accumulated experience, some of it dearly bought, as to the practical lines to be drawn between negative and positive, thermic and chemic, extrinsic and vital means of securing the same ultimate object.

But, now that a general agreement has been reached as to the best practical means of nullifying pyogenic processes, we must recognize that these points of difference were merely minor conflicts in the same camp and that success in the entire campaign against surgical infections has been due essentially to the general principles taught by Lord Lister. Even if his arguments had been addressed to an unprogressive profession, incapable of independent research and thought, even if his system had arisen in a mind itself unprogressive beyond the first point of elaboration of technic, much more than half of the ultimate gain would have been secured. Nor is the credit due Lord Lister eclipsed by the fact that many other workers have attacked the subject from a multitude of aspects, sometimes empirically, and with special reference to puerperal fever, as our own poet-physician, Oliver Wendell Holmes; sometimes with special reference to erysipelas and gangrene; often in recent years from the academic standpoint of bacteriology; often too, with a distinct hostility to the special technic of Lord Lister, and with the special purpose of abrogating the chemic agents introduced by him into a special surgical role.

DR. HORACE M. MOODY, a graduate of the Geneva N. Y. Medical College, 1866, and a Civil War veteran, died at his home in E. Smithfield, Pa., Jan. 18, 1912, aged 73.

DR. FRANK L. SUTTON College of Physicians and surgeons (Homeopathic, Buffalo) 1822, for many years a practitioner in Canisteo, N. Y., died at his home in Port Allegany, Pa., from heart disease, Jan. 7, 1912, aged 57.

DR. SAMUEL MCCARTNEY BLEAKNEY, University of Buffalo, 1866, died at his home in Worthville, Pa., of pneumonia Feb. 2, 1912, aged 76.

BUFFALO has lost during the last month, two distinguished laymen whose work and influence have borne directly on our profession. Hon. J. N. Adam, has left, among other gifts to his townsmen, the Tuberculosis Hospital at Perrysburg. T. Guilford Smith, LL.D., beside participating in the direction of several medical institutions, was for several years on the State Board of Regents and in this capacity, had an active part in elevating the standards of medical education.

BOOKS AND AUTHORS

Recent Progress in Orthopedic Surgery.

L EONARD ELY, in his recent work on Joint Tuberculosis, (see Review, September, 1911), gives some positive views of his own, developed from special study and research. Tuberculosis of a joint exists in the red marrow and synovia only; after true ankylosis occurs, these tissues disappear by degrees, the bone changes in structure and sometimes a central canal forms. The best cures of tuberculosis have been seen after resections which have provided, complete fixation. Hence he believes that incomplete fixation, as provided by braces, etc., is not nearly so effective in curing the process as complete fixation. The best illustration is in the knee of the adult, where he does a modified resection, taking off very little bone and cutting very few ligaments. Bony ankylosis is secured with the loss of very little tissue. At the hip through an anterior incision, he chisels out the head of the femur, and puts up the leg in abduction to prevent dislocation, expecting an early cure.

In Pott's disease, all methods, excepting perhaps Calot's, have been inefficient, from the standpoint of preventing deformity. A kyphos will form and enlarge, especially in the dorsal region, in spite of supports. The first attempt to prevent deformity by operation was by wiring the spinous processes together. Next Lange introduced metal splints alongside the spinous processes, securing them in place by silk. Hibbs operated on several cases by cutting the spinous processes loose at the base, tilting them downward so that each reached from the base above to touch the base below by its tip; the object being to cause a stiffening at that site and prevent the formation of a kyphos. Albee split the spinous processes and inserted into the interval a piece of bone from the tibia, and he reports three cases. Whitman, *Annals of Surgery*, believing the indication is for the dorsal region chiefly, operated on one case, removing a long stout piece of bone from the tibia, and inserting it alongside the spinous pro-

cesses, which were freshened to cause bony union. These cases are all supposed to go unsupported after a short time, the bony union causing an ankylosis, and a local cure.

On account of the universally poor results in structural lateral curvature by the usual methods, more articles constantly appear, in which by various means, forcible correction of the deformity is being attempted. Plaster jackets, applied in various ways, in varied positions, are being used. The keynote of success will probably be that the case must lie flat on the back until the jacket with the use of force has corrected or overcorrected the twist; then the upright position with the effect of gravity allowed.

In infantile paralysis the use of silk ligaments is gaining greatly in favor. The idea is this: wherever there is an unstable joint, insert if possible, strands of braided silk, from bone to bone. Later, on functional use, these strands become imbedded in fibrous tissue, which strengthen as stress is thrown on them. Thus new ligaments are formed which render the joint more stable and prevent deformity. The most usual site for this operation, is at the ankle, where silk is introduced to prevent toe drop.

For the spastic paraplegia of Little's disease, instead of tenotomies of the contracted tendons, or resections of the posterior nerve roots, Allison and others are paralyzing the nerves governing the spastic muscles by alcohol injections. For example, in a case with crossed thighs, flexed knees, and pointed feet, the nerves sought for and injected would be the obturators, the sciatic branches to the hamstrings, the branches of the internal popliteal to the calf muscles. The spasticity is at once lost, the opposing muscles act and gain in strength, and the case soon walks, without spasticity. The operations are of greater magnitude than tenotomies but the results seem to justify this.

Practical Electro-Therapeutics and X-Ray Therapy, Dr. J. M. Martin,
Dallas, Tex., published by the C. V. Mosby Co., St. Louis, 1912,
446 pages, 219 illustrations, \$4.00.

THE Mosby Co. have a reputation for finding authors who prepare works of practical value and bringing the knowledge on a subject up to date, in convenient form. They are no respectors of persons or places, but appeal to physicians who will form their own opinions and who demand as authority, the test tube, laboratory, and clinic, rather than some one's ipse dixit. Dr. Martin presents his subject in a plain, forcible way, with more than enough scientific foundation for the practical applications of electricity and X-rays but paying special attention to the daily needs of the practitioner.

Medical Jurisprudence and Toxicology, by the late Dr. John J. Reese, 8th edition revised by Dr. D. J. McCarthy of Philadelphia, published by P. Blakiston's Son & Co., Philadelphia, 1911. 660 pages, \$3.

IDENTIFICATION of dead bodies, determination of cause and time of death, sexual problems, insanity, life insurance, etc., are discussed in orderly sequence nearly half of the work being devoted to toxicology. It is a concise, thorough treatise.

Infections of the Hand, Dr. Allen B. Kanavel, Chicago, published by Lea & Febiger, N. Y. and Philadelphia, 1912. 447 pages, 133 engravings. \$3.00.

PROBABLY most of our readers, at first thought, would express the opinion that so detailed and local a surgical problem does not warrant a text book of this size. On analysis, this opinion means that the average physician does not realize the complexity and importance of the subject. The book itself demonstrates its right to exist and we feel sure that its use will result in fewer permanent cripples and fewer deaths.

The Champlain Tercentenary. Report prepared by Hon. Henry Wayland Hill, I.L.D., Secretary of the Commission. Printed at Albany, 1911, by the J. B. Lyon Co., State Printers. 534 pages, illustrated.

THE value of such reports to future historians can scarcely be overestimated and, very properly, this report contains not only the history of three centuries ago but much interesting general information, as well as the history of the tercentenary celebration itself. Our distinguished fellow townsman, Senator Hill, has fulfilled most ably, the difficult task laid upon him. Such a task requires literary ability, much critical knowledge both of history in the narrow sense of a record of events, and in the broader sense of a study of human forces

History of the Movement for the State Registration of Nurses. Dr. Eugene Underhill of Philadelphia; Reprint from the Journal of the Medical Society of New Jersey, 1911. 24 pages, paper, free.

This review of a recent movement in various states, deserves careful consideration. If the unfavorable view of the author is correct, we need to unmake some laws; if incorrect, a great injustice is done to a sister profession or, at least, to an important element in it. The pamphlet is, however, by no means an attack on nurses in general. On the contrary it takes up the cudgel in their defense against . . . "the petty, nagging, inhuman, fiendish grind of one set of women upon another," in hospitals, demands greater regard for the health and strength of pupil nurses and elimination of menial tasks from their

routine. We also approve of the view that a state board examination, such as is quoted from the records of New York, asking for treatment, of one disease after another, tends to develop a meddlesome nurse—of the type of popular magazine stories, for instance. We would advise those specially interested to send for the pamphlet and give it their attention.

Handbook of Physiology, W. D. Halliburton, M.D., LL.D., F.R.C.P., F.R.S., London, published by P. Blakiston's Son & Co., Philadelphia, 1911, 10th edition, 923 pages, 592 illustrations, \$3.00.

The work begins with a brief but quite thorough discussion of histology and cellular physiology and ends with a similar discussion of embryology. It is systematically arranged and, without attempting to enter into minutiae, is a full and up-to-date treatise.

Twenty-Seventh Annual Report of the Bureau of American Ethnology for the year 1905-6, printed at the Government Printing Office, Washington, 1911. 672 folio pages, illustrated. This volume, prepared under the direction of W. H. Holmes, Chief of the Bureau, consists mainly of an elaborate monograph on the customs, music and habits of the Omahas, by Alice L. Fletcher and Francis La Flesche, the latter being a member of the tribe.

The value to posterity, not to mention the living, of such thorough studies of the American aborigines, is incalculable, especially in view of the fact that but little time remains in which such studies will be possible and that, with possibly a few exceptions, there are no longer to be found, illustrations of primitive man, of the stage of savagery and living in the stone age. The relatively small amount of money required for scientific research warrants the development of a public sentiment in favor of some slight retrenchment in military and other expenditures, and the appropriation of sufficient funds to publish the reports of this institution up to date.

We have known personally, especially during the Pan American exposition, the devotion and scholarship of Prof. Holmes and of Miss Fletcher and of many of their colleagues.

While this particular volume does not appeal, except in some details, especially to the medical profession, it is worth reading as a matter of general educational interest. We take this occasion to repeat what has so often been said, that every professional and business man should have some hobby aside from his work and we suggest, particularly to country physicians that their knowledge of anatomy, habits of study and local acquaintance, render archaeology of the American aborigines a most appropriate and fascinating form of diversion. With very little effort and loss of time, they can do a great deal toward preserving information concerning the former occupants of this country.

Retinoscopy, James Thorington, A.M., M.D., Philadelphia, published by P. Blakiston's Son & Co., Philadelphia, 1911. 6th edition, 70 pages, 61 illustrations, 10 colored, \$1.00.

This is a very concise, practical treatise, of interest both to the general practitioner and the ophthalmologist.

Manual of the International List of Causes of Death. Prepared by the Bureau of the Census.

While a great deal remains to be done in systematic nomenclature of disease, this list tabulates in convenient form the present accepted nomenclature and should be consulted by all physicians, especially in regard to death certificates, in which accuracy and uniformity are important. We understand that the Manual is intended for free distribution.

The Practical Medicine Series. Ten Volumes. Under the general editorial charge of **Gustavus P. Head**, M.D. Vol. X, Nervous and Mental Diseases. Edited by **Drs. Hugh T. Patrick** and **Peter Bassoe**. Series 1911. Chicago: The Year Book Publishers. (Price, \$1.25 each; entire series, \$10.00.)

An excellent and practical review of recent current medical literature, carefully classified for convenience in "reading up."

Practice of Medicine, Sir **Wm. Osler**, M.D. Published by D. Appleton & Co., 7th edition, 1,143 pages, illustrated. \$.

The title, the author's name and the fact that this is the seventh edition, render comment superfluous. Osler's Practice is a standard work, both for students and practitioners, it has found favor in the past both on account of the authority with which it is entitled to speak and on account of its practical excellence. To add our recommendation, would be like endorsing Rockefeller's check.

Static Joint Diseases. **Dr. George Preiser**, Hamburg. A monograph, 278 pages, 272 illustrations. 1911. Verlag von Ferdinand Enke Stuttgart, Germany.

The author makes a very good case for a reasonable classification and treatment of chronic non-inflammatory localized joint conditions with and without bony changes, often termed "local arthritis deformans."

He groups normal joints according to their relations with neighboring joints into static (mechano- functional) unities in which a static disturbance of one joint in the unity makes itself felt more or less in all the rest. The most important feature of such disturbances, is an alteration of the normal opposition of cartilaginous joint surfaces, throwing certain surfaces or parts of them, permanently out of function leaving the rest of the joint

insufficient for the strains of ordinary use and setting up a train of compensatory growth phenomena, leading to exostoses, and to outgrowth from the soft parts.

This change in the normal contact of joint surfaces he terms joint surface incongruence ("Gelenkflächenin-congruenz.")

The author has made interesting observations on the normal relation of the femur to the pelvis. He finds that the normal relation of the joint of the femur to the pelvis varies in an important degree as it affects its function, not according to the angle of the neck to the shaft, nor to the shape of the acetabulum nor to its position above or below Nelaton's line as heretofore considered. He essays to demonstrate that the important relation is in the anterior, median or posterior position of the acetabulum. The median position he considers normal, the anterior or posterior abnormal and responsible in large measure for changes leading to static defects in the lower limbs and therefore to pathologic disturbances

Among other theories he argues convincingly that the so called "malum coxae senile" is simply a late (very late) stage of "arthritis deformans coxae" the first result of the joint surface incongruence entailed.

It is impossible adequately to summarize, much less discuss, this monograph in the allotted space, in view of the many novel conceptions supported by a vast amount of collected and tabulated measurements and X-ray plates, with a large assortment of case histories in point. The systematic arrangement of the work as a whole offsets the author's cumbrous German style, as he frequently attains orotundity at the expense of lucidity and precision.

The author might also be criticised for an apparent neglect of the foreign literature. He does not cite a single article, outside of the German periodicals. When he laments the absence of literature on the sacro-iliac joint we are inclined to feel that he has slighted American writers, notably Goldthwaite.

J. S. LEWIS.

MISCELLANY

CHINA sends to the United States annually, about thirty million pounds of tea and 15 or 25 million pounds of rice.

AT a time when western New York is piled deep with snow, Atlantic City is available for open-air life. See the advertisement of the Chalfonte.

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No. 9

ORIGINAL COMMUNICATIONS

The Law as it Relates to the Physicians and the Buffalo Health Department.

Dr. FRANCIS E. FRONCZAK, Health Commissioner,
Buffalo.

I HAVE been asked by various physicians on numerous occasions to prepare a paper on the duties of the physicians, as they relate to the Department of Health. Some have asked that I prepare a general paper on physicians and the law. I have devoted considerable time to the preparation of such a paper, and have made quite a study of the criminal, penal, and civil codes, the public health laws, the laws that relate to insanity, tuberculosis, the City Charter and Ordinances, and find that it will take a good sized book to cover all that relates to the physicians in the various statutes. Those who desire to make a more extensive study of the subject, I would refer to Taylor "On the Law and in its Relation to Physicians." To Purrington on "Legal Decisions, Medical." To Harold's "Manual on Legal Medicine." To Tidy on "Legal Medicine," and Allen McLane Hamilton, Peterson & Hains, and many others. The literature on this subject is not so meager as some might think.

In view of this, I will, of course, only dwell on matters which are binding in this City and State, and will start with the City Ordinances.

Every physician, accoucheur, midwife, undertaker, sexton or superintendent of any cemetery shall register his or her name in a book provided for this purpose in the Bureau of Vital Statistics, at the office of the Health Commissioner. Every physician before practicing in the City of Buffalo and County of Erie must register in the County Clerk's office.

Probably the question which is most often asked is what diseases are supposed to be infectious.

UNDER THE CITY ORDINANCES.

A. Contagious (very readily communicable): Measles, Rubella, (Rötheln) Scarlet Fever, Smallpox, Varicella (Chickenpox), Typhus Fever, Relapsing Fever, Bubonic Plague.

B. Communicable: Diphtheria (croup in all forms), Typhoid Fever, Asiatic Cholera, Anthrax, Glanders, Epidemic Cerebro-Spinal Meningitis, Leprosy, Tuberculosis (of any organ), In-

fectious Eye Disease (trachoma), Suppurative Conjunctivitis, Ophthalmia Neonatorum, Puerperal Septicaemia, Erysipelas, Whooping Cough, Poliomyelitis, Polioencephalitis.

C. Indirectly communicable (through intermediate host) Yellow Fever, Malarial Fever.

It is the duty of every physician upon discovering any case of infectious disease to report the same forthwith to the Health Commissioner. By forthwith is meant to telephone immediately upon discovery to the Health Department, which is open from 8:30 in the morning until 11 P. M.

The New York State Department requires the use of a one per cent. solution of Nitrate of Silver immediately after birth, as a prophylaxis against Ophthalmia Neonatorum. Complete outfits may be obtained gratis from the Buffalo Health Department and can be constantly carried in the obstetric bag.

Diphtheria—Quarantine will be maintained until two negative Cultures, the first by the attending physician and the second by an inspector from the Department, have been received.

Other children in the same family may be permitted to attend school, provided a culture from their throats show negative results, their clothes and bodies are disinfected, and they live away from the quarantined premises.

Scarlet Fever—The minimum period of quarantine is thirty-five (35) days, and as much longer as the case may require until recovery. Exposed children must be excluded from school for two weeks. The same period must be observed by those pupils who leave home for the purpose of attending school. After having been away from the quarantined premises for two weeks, a physician's certificate stating that he has examined the pupil and that he is free from disease, will be approved by the Department.

Whooping Cough—Minimum period of exclusion from school is eight weeks.

Measles, German Measles, Chicken Pox are excluded for a minimum of two weeks.

All others until recovery.

Typhoid Fever—Report all cases, regardless of Widal results.

Any officer or person in charge of any person, asylum, hospital or public or private institution of any kind shall report forthwith to the Health Commissioner any and every case of any infectious disease (except tuberculosis which must be reported within twenty-four hours), which shall arrive or be discovered, and shall, once a week, report all such cases, and upon death or recovery shall report the date and the details of the disposition of the case according to the rules and regulations of the Health Department.

The removal from one building to another of any person sick with any infectious disease is prohibited, except typhoid fever, malarial fever and tuberculosis, without permission from the Health Commissioner, and in the case of tuberculosis the premises from which the sick person was removed shall be forthwith disinfected before being again occupied and, within forty-eight (48) hours after such removal, notification (made compulsory by the State Law of the physician in attendance) shall be made to the Health Commissioner. Permission is sometimes granted to remove such person if a good and sufficient reason can be shown that it would be to the advantage of the community to remove such person from one house to another.

Every Smallpox case shall be removed to the quarantine hospital, unless such removal would place the life of the patient in jeopardy.

No person other than the attending physician shall enter or depart from a house in which is a person suffering from any of the diseases mentioned without permission from the Health Commissioner, except in cases of tuberculosis, typhoid fever, infectious eye diseases, puerperal septicaemia or malarial fever, and until such house has been disinfected according to the rules of the Health Department.

Removal of an infected person from one building to another, except to a hospital, is forbidden, without permission of the Health Commissioner.

Under the general title "Burial of the dead" we read that no death certificate shall be valid unless signed by the County Medical Examiner or a regularly licensed physician. By a decision of the Corporation Counsel this includes the Osteopaths.

A dead unembalmed body of a human being shall remain unburied no longer than three days, except by special permission from the Health Commissioner. Nor shall any dead body be left unburied for more than six days.

No body may be embalmed unless a physician issues a burial permit and also signs especially the permit providing that the body may be embalmed.

State Law prohibits the embalming of any dead body without a written certificate from the attending physician that there are no facts attending the illness and death of the person that would preclude such embalming from a medico-legal standpoint.

Physicians are often inquiring under what conditions it is possible to disinter or expose the remains of a dead person.

Ordinances provide that the remains of a person who shall have died of an infectious disease cannot be lawfully disinterred or exposed within ten years from burial, or any other human remains within one year after burial, without a permit from the

Commissioner of Health, and upon the payment of a fee of \$5.00 for such permit. (This \$5.00 of course must be turned into the City Treasury). Such disinterment or exposure shall be made only under the supervision of the Health Commissioner and pursuant to such rules and regulations as may be prescribed by the Department of Health.

File a certificate of every birth within three days, upon blanks furnished by the Bureau of Vital Statistics.

Premature births, or infants who die immediately after birth, require both a birth and a death certificate. A birth certificate must be filed of every infant that has breathed after birth.

Infants born dead must be reported on a still-birth certificate.

Death certificates must be made by the physician last in attendance upon the deceased, using blanks obtained from the Registrar of Vital Statistics. Every question should be answered, writing plainly and with unfading ink, as these are permanent records. No soiled or mutilated certificates will be received. A death certificate must be filed within twenty-four (24) hours, except in death from a contagious disease when it must be filed at once. The nomenclature adopted by the Bureau of Census, the New York State Department, and the Buffalo Health Department, must be followed.

Law prohibits the embalming of any dead body without a written certificate from the attending physician that there are no facts attending the illness and death of the person that would preclude such embalming from a medico-legal standpoint.

Under the City Charter, City Ordinances, and the State Law, it is a penal offense for any one to interfere with the Health Commissioner, or any one connected with the Health Department, when they are investigating any suspected violation of the health laws, and it is a penal offense (Penal Law Sec. 1741) to interfere with them in the performance of their duty, or to molest them in their work, and in the discharge of their duty, and one so doing is guilty of misdemeanor.

The Superintendent of a hospital, or the persons in charge of any hospital under the law, must report to the Health Commissioner any and all cases of infectious diseases that have been conveyed or carried to the hospital in any carriage, or other public conveyance, other than the ambulance, giving to the Commissioner the name of the driver, or person in charge of such vehicle, and must enter upon the books and records of such hospital the name of such driver or person in charge, or owner. Failure subjects the offender to a fine of not less than \$25.00 or more than \$100.00 for each and every offense.

Pupils residing in asylums or institutions shall on Monday of each week furnish a certificate from the head of such institution or attending physician to the effect that no contagious or infectious disease has existed in the same for the past week, and no pupil shall attend any school who resides in any public institution wherein a contagious or infectious disease has occurred, until he or she shall present a certificate from the institution, or the attending physician to the effect that no new case has occurred within ten days; that all cases have been removed to the hospital for contagious or infectious disease; that all approved methods of disinfection have been successfully employed and that no communication has been allowed between the attendants of isolated wards and those of the institution proper. Such certificate to be approved by the Health Commissioner. A violation of the above ordinance subjects the offender to a fine of from \$50.00 to \$250.00.

Under Section 58 of the Labor Law every physician attending or called in to visit a patient whom he believes to be suffering from poisoning from lead, phosphorus, arsenic or mercury, or their compounds, or from anthrax, or from compressed air illness, contracted as the result of the nature of the patient's employment, shall send to the Commissioner of Labor, at Albany, a notice stating the name and full postal address and place of employment of the patient and the disease from which, in the opinion of the medical practitioner, the patient is suffering, and failure to send such a notice is punishable by a fine not to exceed \$10.00. This section took effect September 1st, 1911.

With the exception of the cities of New York, Brooklyn, Buffalo, Albany and Yonkers, physicians are entitled to receive twenty-five cents for reporting any contagious diseases, or filing of a birth or death certificate.

Under Section 313 of the Public Health Law all children admitted to institutions for orphans, destitute or vagrant children or juvenile delinquents must be examined by a physician, stating whether the child has diphtheria, scarlet fever, measles, whooping cough, or any contagious or infectious disease especially of the eyes and skin, which might be communicated to other inmates, specifying the physical and mental condition of the child, the presence of any indication of hereditary or other constitutional diseases, or any deformity or abnormal condition which may be found upon examination, and the physician must again examine the child after it is kept in strict quarantine the necessary number of days before the child can be admitted to come in contact with the other children.

Section 314 provides that such a physician shall, at least once a month thoroughly examine and inspect the entire institution,

and report in writing to the board of managers or directors of the institution, the condition of the plumbing, sinks, water closets, urinals, privies and dormitories, the physical condition of the children, the existence of any contagious or infectious disease, particularly of the eye or skin, their food, clothing and cleanliness, and whether the officers have provided sufficient nurses, orderlies and attendants.

Section 315 makes it mandatory upon the physician of any institution in the state to notify in writing immediately the local board of health and the board of managers or the directors of any institution of any violation as regards the condition of the dormitory where beds must be separated by a passageway of not less than two feet in width, so that the air can circulate freely, and that there is 600 cubic feet of air space in the dormitory for either bed or occupant.

Sections 320 to 332 refer particularly to tuberculosis providing that all cases and all forms of tuberculosis, regardless of sputum examination or previous report of other physician, shall be reported to the Health Officer within twenty-four (24) hours after discovery. Laboratory results in any examination do not constitute a report of a case. In tuberculosis the following points are of special importance. The report must be made by physicians, also by persons in charge of hospitals, dispensaries, etc. The examination of sputum is made by the City Bacteriologist free of expense; all tuberculosis records are protected against public inspection; the courts having rules that they cannot even be used as evidence in a trial. In case of death or removal or vacation of any apartments or premises, the attending physician, or if no physician, the owner, lessee or occupant or other person in charge of such premises or apartments must notify the Health Department of such death, or removal within twenty-four (24) hours thereafter, and these apartments or premises so vacated cannot again be occupied until they are duly disinfected, cleansed or renovated. The Health Department should be notified when a patient discontinues treatment with a physician or when he moves to another part of the City, or out of the City. In reporting the cases the physician should state whether he is willing and able to attend to the enforcement of all precautionary measures.

Sputum cups, napkins and a complete outfit for the use of patients will be furnished by the Department of Health. Also circulars with complete information. In such cases where the attending physician is unwilling or unable to attend to the enforcement of precautionary measures, the tuberculosis inspectors will relieve him. Occupancy of any premises or apartments is

prohibited until the order of the Health Commissioner is complied with.

Tuberculosis nurses will attend patients on request of the physician or when patients are in need of assistance.

Failure of a physician to perform duties, or making false reports, relative to tuberculosis, makes him guilty of a misdemeanor, and on conviction he may be subject to a fine of not more than \$100.00.

Under Section 200 of the New York State Penal Code a physician or surgeon who being in the state of intoxication, without design to affect death, administers a poisonous drug or medicine or does anything else as such physician or surgeon and produces the death of another person is guilty of manslaughter in the second degree, and, if he injures his life, or his health is seriously affected, is guilty of misdemeanor.

It may surprise many a physician that under Section 191 of the Penal Code a person who provides, supplies, or administers to a woman, whether pregnant or not, or who prescribes for, or advises or procures a woman to take any medicine, drug, or substance, or who uses or employs or causes to be used or employed, any instrument or other means, with intent thereby to procure the miscarriage of a woman, unless the same is necessary to preserve her life, in case the death of the woman, or of any quick child of which she is pregnant, is thereby produced, is guilty of manslaughter in the first degree.

Under Section 294 a person is guilty of abortion even if he only prescribes, supplies or administers to a woman, or advises or causes any woman to take any medicine, drug, or substance, and is punishable by imprisonment in state prison for not more than four years or in a county for not more than one year. However, mere advice, but not followed by any action on the part of the woman based upon such advice does not make out the crime of abortion.

It is not essential to guilt that the woman should be quick with child, nor is it a defense that a harmless substance was administered provided the guilty intent existed. A physician was convicted in Iowa, though he pleaded that he gave the woman who was not quick with a child a substance which could do no harm to any woman, whether pregnant or not.

In another case it was declared by the judge that it is not necessary for the people to show that the use of the instrument was not necessary to preserve the life of the woman or of the child, but the burden of proving such necessity for its use rests upon the accused. *Bradford v. People*, 20 Hun. 309.

And under Section 297 of the Penal Code, any person who gives an instrument, medicine, or drug, or any other substance,

with intent that the same may be unlawfully used in procuring the miscarriage of a woman is guilty of a felony.

Not only under City Ordinances, but under the Penal Code, a person who endeavors to conceal the birth of a child by any disposition of the dead body of the child, whether the child died before or after its birth is guilty of misdemeanor.

Under Section 318, any person who gives receipt, prescription, drug or medicine, which prevents conception, or causes unlawful abortion is guilty of misdemeanor and may be fined not more than \$1,000, or sent to prison for one year.

It is even forbidden to exhibit or discuss offensive objects, such as unnatural and monstrous births, even though the pictures are not immoral. It is enough to expose to public view in a public place, so that it might probably be seen by the public, and does not depend upon the number of persons to whom the exposure is made.

It may surprise many, though in this country it seldom is applied, that a physician who acts as a second or a surgeon advises or abets or is present at a duel or combat that has been previously agreed to is punishable by an imprisonment for not more than seven years.

Very often the Department of Health is asked whether or not a physician has the right to dissect the dead body of a human being. This right exists only in cases prescribed by special statutes, or where a coroner or medical examiner is authorized by law, or where the husband, wife, or next of kin of the deceased being charged by the law with the duty of burial may authorize dissection for the purpose of ascertaining the cause of death and no further. I would advise you in these cases always to get your authorities in writing and hang on to it, because it may come handy within the statutes of limitation. Of course the District Attorney has authority to order dissection whenever there is suspicion of crime being committed.

Any person who makes, causes or procures any dissection except by authority of the law, or in pursuance of a permission given by the deceased is guilty of misdemeanor. And the following section provides that the remains after dissection must be buried.

Of course all physicians know that body stealing is prohibited. It is not practiced now, and did not occur, as much as was popularly surmised, formerly. The law provides for imprisonment for not more than five years or a fine not to exceed \$1,000, or both for this offense.

A person who willfully opposes or obstructs a health officer or official charged with the enforcement of the health laws in

performing any legal duty is guilty of misdemeanor. (Section 396 Penal Code).

Section 397 provides that any person who wilfully violates or refuses or omits to comply with any lawful order or regulation prescribed by any local board of health or local health officer is guilty of a misdemeanor, and that any person who wilfully violates any provision of the health laws, or any regulations so established is liable to imprisonment not to exceed one year, or by a fine not to exceed \$2,000 or both. Under this section any physician who does not report contagious and infectious diseases, as provided by the rules and regulations of the Health Department, or does not report births, within the time as prescribed by the law may be indicted by the grand jury.

Quite often we are asked whether or not a physician may maintain a private insane asylum, or an institution for the care or treatment of unsound minds. The Penal Code says that a license must be granted, and the law relating to insanity, No. 59, says that the Commissioner of Lunacy must first examine the place and may grant a license providing it fully complies with the rules and regulations of that commission. Any one who omits to have such examination made of such an institution without a license is guilty of a misdemeanor.

Under the Code of Criminal Procedure if a female, convicted and sentenced to punishment by death, is pregnant, she must be examined by a jury of six physicians to inquire into her pregnancy, and the physician so acting as a juror need not be qualified to serve as a juror in a court of record.

Whenever the death penalty is carried out upon a criminal in this State there must be two physicians present at the execution, and immediately after the execution a post-mortem examination of the body of the convict must be made by the physicians present, and their report must be in writing, stating the nature of the examination, and that the person was executed according to the law.

Another matter which may interest a physician is that there is a provision under the Code forbidding the exhibiting of a person affected with a contagious disease in a public place, unless such exposure is necessary to remove him, and this removal must be done in a manner not dangerous to public health. Any one who wilfully exposes himself to another is guilty of a misdemeanor.

Sanitation of the Cities of the Niagara Frontier. The Buffalo Waterworks Controversy.

GEORGE EDWARD FELL, M. D., F. R. M. S.
Buffalo, N. Y.

Formerly U. S. Assistant Engineer,* Construction of Harbor Works, Lake Erie. Assistant Engineer, City of Buffalo, N. Y. Following graduation in medicine, President American Microscopical Society, Professor of Physiology and Microscopy Medical Department of Niagara University, Physician Sisters of Charity Hospital, Assistant Surgeon, Charity, Eye, Ear and Throat Hospital, Etc.

THE editorial of this JOURNAL for January 1912, refers to the possible contamination of our intakes by refuse thrown from vessels, and also from the hulls of the vessels, passing in and out of Buffalo Harbor. It suggests a scheme impractical and remarkable in the preparation of new channels, or the movement of the intakes to peculiar locations.

To prevent "roiliness" there is suggested the construction of another breakwater, at right angles to present one, to provide "quiet pools" which could be dredged repeatedly from the accumulated material which might fill them. A breakwater in this position would not afford a "lee" or quiet the water in a S.W. gale. We cannot reconcile the idea of the silt settling to the lake bottom, when every wave produces a disturbance to a greater or less degree of every particle of water to the greatest depth of this shoal lake. As long as the winds blow, we cannot prevent the suspension in our lake water of the accumulated bottom debris known as silt.

CAUSE OF THE "ROILINESS."

Silt the result of animal, vegetable and mineral substances which have gained access to the water of the lake and been reduced to an impalpable powder, is found everywhere on the bottom of the lake where no marked current exists. It is held in suspension in the water in gales and we would be no better off so far as it is concerned, if we had an intake constructed, half way between Sturgeon Point and Point Abino, or in the middle of the lake.

On this account for the purity of our water from this non-pathogenic debris,** we will absolutely require a sedimentation basin, or require that every individual filter the water drawn from each tap in stormy weather.

Sedimentation will give us non contaminated pure water, if taken from the sites of the present intakes, but assuredly not

* civil.

** All evidences of value indicate that the water of Lake Erie, outside of littoral contamination is pure and free from pathogenic factors, when naturally sedimented by calm weather.

pure, if seepage of the impure Buffalo River water contaminates it before it reaches the wells at the shore ends of the tunnels.

MEDICAL KNOWLEDGE NOT ENGINEERING KNOWLEDGE.

Allow me right here, to express an opinion regarding this controversy, which is, that medical men without special engineering experience, are not qualified to pass judgment upon engineering problems. Furthermore appended is a statement of the work with which the author was associated as hydrographical engineer, in the earlier days of his life, all of a most practical character, to indicate whether it should be assumed that he was so qualified.

In June 1869, the writer as U. S. Asst. Engineer, had direct charge of the placing of the first Crib of the great Breakwater system of Buffalo Harbor, having located the buoys for its location by triangulation. For two years previous he had been employed in connection with the extension of the old light house, South U. S. pier. He was employed in the actual observations of the currents of the Niagara River for the purpose of determining the location of the draw of the International Bridge, which demonstrated positively that the currents follow *closely* the axis of the river a matter of great importance, in this controversy. He made extensive surveys at Buffalo, Dunkirk, Erie and other harbors. In 1873-4, he made the survey for the "Harbor of Refuge" at Cleveland, Ohio, making the observations of the lake bottom at Cleveland, as well as Buffalo Harbor with a steamboat of his own devising, which admirably answered the purpose.

Subsequent to graduation in medicine, he has been a close observer of the changes taking place in and about Buffalo Harbor, being associated with the Crystal Beach Steamboat line for a number of years.

EXPLANATION OF THE AUTHOR'S INTEREST IN THE CONTROVERSY.

In 1903 he made the *first* extended study and survey of the currents at the Easterly end of Lake Erie and head of the Niagara River. This was reported in great detail to Mayor Erastus C. Knight. His views were strongly opposed by the health authorities of the State and City, and the great majority of physicians and citizens, who, led by Engineer Fuller of New York City, differed from the author as to the danger of infection of the site of the old intake, at Massachusetts Ave., from the typhoid epidemic at Smokes Creek, and the sewage from Buffalo River. This was the principal question upon which hinged the need of new extensive water works for the city.

The author contended that the physical conditions, principally the currents at this part of the lake, influenced in their course

by the outflow over Niagara Falls, as demonstrated by his extensive survey, prevented infection of the site of the intake.

Engineer Fuller and those associated with him succeeded in putting through the "seven million" dollar, new water works system. Subsequent investigation by celebrated experts, employed by the Buffalo Chamber of Commerce, have demonstrated that in many ways the New Water Works system was a great mistake, agreeing or showing that the contentions of Dr. Fell in 1903 were fully justified.

SOME QUESTIONS REGARDING THE CURRENT OBSERVATIONS.

My first demonstrations made in March and April 1903, in an Easterly gale, resulted in showing that the current starting in the course of the U. S. range lights for vessels entering the Niagara River between the "Dummy Light" and the Canadian shore, would pass close to, but Westerly of the old intake. No gales, Easterly or Westerly, can greatly modify the course of this current, *the proximity of the Canadian shore preventing it.*

The great mass of water entering the river follows the course of this deep channel current, whereas the entrance of the river and lake currents Easterly of the Dummy light, is comparatively shoal, clear to the American shore. This demonstrates that the current West of the Dummy, light, dominates the general entrance currents from the lake, and prevents with the increased outflow and necessarily increased current in the river in high water, *Southwesterly gales*, up lake currents at the Northerly and Southerly ends of the New Breakwater such as Dr. Allen J. McLaughlin* suggests as probable in extra heavy Southwesterly gales, with oscillatory fluctuation of the water of the lake. The entire length of the New Breakwater comes within the influence current of the Niagara, the controlling factor here. Please bear this in mind, as these important factors in the control of the currents were not sufficiently amplified in my report made to the City of Buffalo in 1893, or the review published in the Journal of the American Medical Association, September, 1910.

THE GREAT TEST CURRENT OF THE CONTROVERSY.

The current, Southerly and Easterly around the South end of the "New North Breakwater" has quickly carried me in a small boat, on the West side of breakwater Southerly, along the southerly one-third of the breakwater to the south end around into the harbor. Under any condition of gales, it is believed this current is constant as to direction. The writer has photographs which indicate its course when outlined with floating ice. From hundreds of personal observations I do not believe it has changed since the first crib of this breakwater was put in place. The physical conditions existing if carefully studied, simply explain the

* See Bulletin No. 67, page 42, Marine Hospital Service of the United States, by Dr. Allen J. McLaughlin.

cause and course of these currents as demonstrated by the deep water float observations.

The influence of a gale of wind exerted on the crests of innumerable waves, which produces moving water to the greatest depths in a shoal lake, drives it as a body in the direction of the wind, until the rise is sufficient to produce an oscillation, which lowers it. That such a fall takes place with sufficient rapidity to entirely overcome the influence of the increased current, under such conditions, of the Niagara River at the North U. S. Breakwater, from my observations, I cannot believe.

Now if these statements be true, they can be verified any time the currents suggested by Dr. McLaughlin, do not take place, and our new intake, as well as the old, is in no danger of contamination from shore currents carrying the foul typhoid debris of Buffalo River water. The opinion of those who have been active workers in and around Buffalo harbor for years, not interested in the promulgation of the new water works system, agree with me in these views.

WHAT NATURAL CONDITIONS COULD HAVE GIVEN US.

The following plan (See Chart) indicates how all of these questions viz: possibility of infectious contamination of intakes from either the American or Canadian shore, infection through seepage of foul water over the tunnel conduits, and the question of adequate acreage for sedimentation purposes, ideal in character as to site, location and expense could have been eliminated from this controversy.

It is put forth with the purpose of strong criticism of the factors which should be permitted to rush through a scheme of improvement so vital to the interests, not only of a great city, but an additional large populous territory, when there was so much of apparent merit in the reasons for the disinterested opposition to it by the author and those who honestly supported his views.

This plan is well within the practical possibilities, it would be of international value, would have provided an ample site for the absolutely needed sedimentary basin, or even filtering plant, if needed. It would give us a much better and the most satisfactory site for the intake, which could be connected with much less length of tunnel, more ideally located, and at a saving of millions of dollars. It was right before the expert savants, who conceived and constructed the present new system, which will ever prove troublesome and the great disaster of last Summer may prove that it was not needed for years to come.

WHAT MAY YET COME OR MIGHT HAVE BEEN.

It is this—extend the old waterworks tunnel, from old intake to the Canadian side of the river, and make it impervious to seepage a simple matter; raise it to an open covered conduit to be carried westward to the table land, now farm land, where there is no interference with the extent of the size of the sedi-

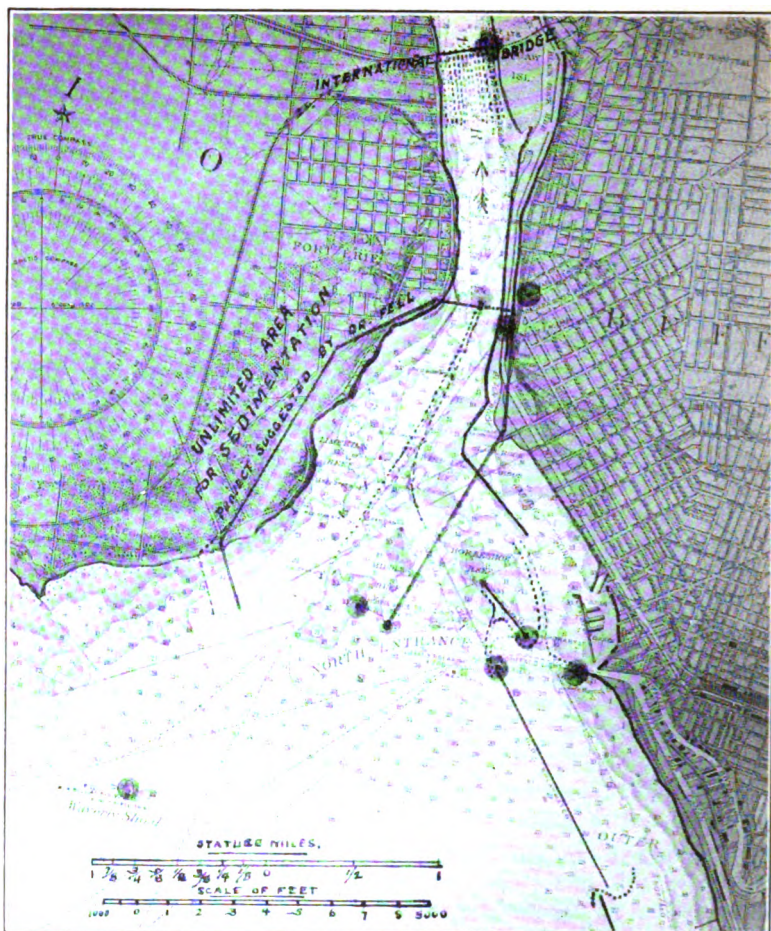


CHART OF NORTHERLY SECTION OF BUFFALO HARBOR AND HEAD OF NIAGARA RIVER.

At extreme Northern part is shown the International Bridge with site of current observations of about 1870, indicated by black dots.

A little North of Center of Chart, the "Old Intake" is shown.

The project suggested by author, illustrates the tunnel from "Old Intake" extend to the Canadian shore.

The conduit from this point to the Lake Shore in neighborhood of Fort Erie Grove, with short tunnel projecting into the lake to 29 feet of water.

The intake at end of tunnel, would be placed in 29 feet of water, and be one mile westerly of the present new intake, in the best water in the lake.

On the American shore is shown the new tunnel between the "Old and new" pumping stations, with the long stretch of new tunnel, from the new pumping station, to the new intake in the lake, West of Emerald channel.

Also is seen Bird Island Pier, The North U. S. New Breakwater, The old Breakwater, the first crib of which was placed in position June 1869 by the author, who was then U. S. Assistant Engineer, with Captain F. Harwood, U. S. A., Engineer in Charge.

The shaded round spots indicate location of light houses, or harbor lights.

The general course of the various currents of note are shown in dotted black lines.

mentary basin, pumping works or whatever adjuncts may be needed in the practical working of the plan. Utilize the present pumping facilities at Massachusetts Avenue, with practically no great change for the pumping of the pure sedimented water, from the new up lake intake.

This could be placed a mile further up the lake than the present new "Emerald" channel intake, and would have no connecting tunnel with a possible seepage distance of foul pathogenic, Buffalo river water of about three-quarters of a mile passing over it as is the condition with the new elaborate and already partially constructed scheme with its two miles of expensive tunnel construction already built.

MINIMUM LENGTH OF TUNNEL REQUIRED.

There would be required by this plan but three-fifths of a mile of tunnel, including that in the Niagara and to connect with the intake in the lake. This intake would be in 29 or 30 feet of water instead of in 19 feet. It could be a mile further up the lake than the present new intake well away from any Canadian or American shore contamination. There would be seven-eighths of a mile of covered shore conduit, with 3,500 feet of sedimentary basin of any width desired. This would be located on practically level ground and could have been purchased or obtained from the Canadian Government as it could be made mutually as well as internationally satisfactory.

WHAT IT WOULD ACCOMPLISH. IS IT PRACTICAL AND FEASIBLE?

Its simplicity indicates that there is nothing impractical or difficult in the project as suggested. Millions of dollars could have been saved the city of Buffalo, had the great rush and indefensible hurry to spend the money of Buffalo's citizens, have been halted in 1903.

We have nothing in our partially completed plan which in any way compares with that I have suggested in its absolutely answering the necessities of the case. It is the most feasible method of settling the question of the supply of pure potable water to the citizens of both nationalities, at the Easterly end of Lake Erie, and Niagara frontier, for all time to come.

We do not know what the future may bring forth, but the question arises, whether it would not be better to construct this new project, build the five-eighths of a mile of tunnels, with a temporary conduit connecting the two, which later could be connected with the sedimentary basin, than it would be to spend more millions in patching up the present project with no accessible territory for a complete sedimentation obtainable.

THE MILITARY ASPECT WOULD NOT BE CHANGED BY THE NEW PROJECT.

The military aspect and international features are not at all new along the lakes; how many U. S. channels have been con-

structed in Canadian waters? The "Soo" locks at St. Mary's River are utilized by both countries; electricity manufactured in Ontario, is marketed in New York State, and is a no more marketable commodity than water.

What is most interesting, I am credibly informed *that our New Intake is in Canadian Water*, so that we are really taking water from foreign territory as it is.

The value of the desirable combination, the City of Buffalo with its unlimited money, as we understand and, the ideal farm land of the Fort Erie territory, and splendid location for intake would result most satisfactorily for the citizens of both countries.

This much for a might have been, possibly future project infinitely better than the one hastily and unwisely adopted by the City of Buffalo.

THE AUTHOR'S CURRENT OBSERVATIONS.

When my current observations were made in 1903, the best motives only influenced me. The results demonstrated, the currents working Easterly between the breakwaters, and in the same direction south of the new North Breakwater, was an interesting revelation.

Without specially considering its importance, I had noticed the latter from the time of the location of the very first crib of the North Breakwater and during its construction.

I was astounded by the assumption on the part of Engineer Fuller that I was wrong, because I could not believe that any other conclusion could be arrived at as the physical condition plainly points to the cause of these currents. The matter is not at all complex when the subject is honestly investigated.

But when I read his report and the manifest futile efforts he made to bolster up an argument to prove clinically that the Buffalo water *intake location* supply was contaminated from Smokes Creek and Buffalo River, and not through seepage, and other well-known sources, and found that no one seemed to agree with me. When the fatal project for the welfare of Buffalo was adopted and pushed to completion I took it coolly, for I believed a day of recokening would surely come as it has, and that the truth would some day prevail.

THE AUTHOR'S VIEWS IGNORED .

To show that my opinion was of no account, when my bill was presented to the city, recommended by Mayor Knight, who saw the force of my arguments, and believed then as now that they were right, it went to the committee of the aldermen and was discussed.

Ex-Mayor Adam, then Councilman, took special delight in opposing it, and asked what value my work was to the City of Buffalo. I explained that it indicated that our intake was not contaminated by Smokes Creek or Buffalo River water; that it

was not necessary to construct a great new water works system, etc., but it had no effect. My bill of \$600, was cut to \$200, not enough to meet my expenses; my attorney informed me that even with the Mayor approving it, it could not be collected, so that I necessarily accepted it. The city paid for this service at the rate of about \$2.00 per day when it at the same time was paying Mr. Fuller \$75.00 per day. It would have paid the City of Buffalo to have paid Mr. Fuller one million dollars and J. N. Adam another million, and held up the report of the board of engineers which made the plans for the extensive tunnel scheme than to have gone through with it, with the existing results. With tunnels that permit of seepage of Buffalo River water, so that we can never be positive that our supply is not contaminated. A tunnel that will fill as rapidly as the nine foot tunnel did, and might not stand up against a forty-five foot pressure is not safe to depend upon for a pure water supply, when unquestioned typhoid contaminated water is running over it.

THE CAUSE OF THE CONSTANT CURRENTS AT THE HEAD OF THE NIAGARA.

There is no uncertainty here, the enormous outflow of the Niagara River is the factor which influences and produces the peculiar courses of the currents at the Buffalo end of Lake Erie.

This great factor has been studiously ignored and placed in the background by the advocates of the great unnecessary additional water works system at Buffalo, from Engineer Fuller, his partner Rudolph Herring, to the Committee of the Erie County Medical Society which echoes the opinion of Dr. Allen J. McLaughlin of the Marine Hospital service expressed in the presentation of a chart in his "Bulletin No. 77." From my many years of personal experience sailing in and around Buffalo Harbor, I cannot reconcile his views with the other features of his most valuable report.

THE OUTFLOW OF NIAGARA RIVER.

From the report of the engineers who constructed the International Bridge at Buffalo, N. Y., along about the year 1870, and from a series of current observations which as (U. S. Assistant Engineer) and transit man, I assisted in making, it was determined that under ordinary conditions there are 245,000 cu. ft. of water per second passing down the river. Assuming this to be the case we have 1,575,000 galls. per second—94,500,000 galls. per minute—5,670,000,000, per hour or the enormous quantity of 158,347,612,800, over one hundred and fifty-eight billion gallons per day of twenty-four hours.

And yet as I listened to the testimony of Mr. Herring on the subject of the contamination of our old and new intakes, during the so-called "Fisher investigation" he failed to mention this great factor as of any importance regarding the question, when

it is really the *paramount* one. It makes our condition so far as the influence of the currents goes different from that at any other point on the great lakes, and accounts for the immunity of the intakes from shore pollution.

To form an opinion of this great outflow, we may state that more water passes from the entrance of Lake Erie into the Niagara River in two minutes, than is pumped into the whole Buffalo city water supply in twenty-four hours.

When the lake rises in heavy gales the current in the Niagara River may run as swiftly as twelve miles per hour, according to Col. Gzowski, the engineer of the International Bridge, and outflow is enormously increased, thus tending the more to retain the general constant course of the currents, notwithstanding the fluctuations, or rather oscillations of the waters of the lake by Western gales.

TABLE NO. XII, OF ENGINEER FULLER'S REPORT.

Another point according to Engineer Fuller's Report to the City of Buffalo, which shows some questionable and unexplainable findings is that over three thousand feet of the new tunnel, between the new broken down pumping station and the new intake at Emerald channel, has the foul typhoid water of Buffalo River passing over it.

What a great chance for seepage to make our potable water much more dangerous than ever before if this great tunnel is not water tight. Is this tunnel any better in its construction, than the nine foot one between the two pumping stations? is a question of vital importance.

Again this table No. XII is supposed to show the results of bacteriological tests of the Lake Erie water, four feet below the surface, on a still day in August. One mile out in the Lake at Stony Point it is very good or ("25 c.c."). It reports very good water also half way between the "Dummy light" and the North end of "old breakwater," also very good water half way between Bird Island Pier and the old intake, thus granting a factor of safety, so far as any danger of contamination from sewage by the old intake is concerned of about 350 feet, a pretty good allowance in a current running from seven to twelve miles per hour. But the remarkable feature is that from Smokes Creek, entirely to the North end of the Old Breakwater, the red light, the water is bad, bad, or "5% c.c." water. This feature is unexplainable, and from the physical conditions which causes the current to pass from the lake to the harbor along this entire breakwater, it cannot be true.

Was it intended to show that Smokes Creek in quiet August weather, when there was virtually no flow from it befouled the great body of water, west of the over three mile stretch of breakwater, notwithstanding the great body of water passing from the lake to inner harbor through the South Channel En-

trance and coming from the admittedly pure (25 c.c.) water one mile out in the lake at this point. This channel entrance is about six hundred feet wide, by thirty feet in depth and is supposed to be brushed aside by the infinitesimal Smokes Creek outflow. Such bacteriological examinations are worse than useless:

BACTERIOLOGICAL TESTS NEEDED.

Honest impartial bacteriological tests of simultaneously collected samples of water, from the intake end, and from the wells at the shore ends of the tunnels, where seepage may have affected the water in its passage through the tunnel, should be systematically made and kept up for a considerable period of time Summer, Winter and also Spring, when the freshets are throwing the over filled streams and sewers with contamination of all kinds into the river and lake.

It is these natural conditions which will prove who has been right in his opinions. A grand and unanswerable demonstration of this character was made by nature in this present controversy in March 1903, when the whole typhoid debris of Smokes Creek and Buffalo River, full of sewage and typhoid "scourings," was washed out into the lake and Niagara River, when it was predicted by the advocates of the unsafe location of the old intake, that a terrible epidemic would prevail, and yet during this time and following it, the percentage of typhoid in the city *continually decreased*.

Nature will not deceive us, and yet, notwithstanding this unquestionable proof of the purity from contamination of the old intake site from Buffalo River and Smokes Creek, the advocates of the seven million dollar project still claimed that it was located in a dangerous location. I have been and am willing to abide by the verdict which the natural conditions at this end of Lake Erie will present as the years go by, and do not fear the result.

THE MUDDY CLAY COLORED WATER OF LAKE ERIE.

Another fact which I have not seen mentioned in this enquiry of considerable importance macroscopically, pertains to the color of the Lake Erie water in the neighborhood of the Emerald Channel.

Some prominent persons have inferred that the clay colored water which has been seen at times to pass from the region of the Emerald channel towards the old intake was evidence that Buffalo river water contaminated the old intake. I have observed this several times, but as this part of the lake was for fifteen or twenty years, the dumping ground for thousands of tons of material, principally red clay, dredged from the slips and dock

construction of the inner harbor, we can readily dispel the idea that such color is associated with Buffalo river water contamination. Under wind and ice disturbances, this soft clay is carried into suspension in the water, and serves often to make our drinking water more like that of the Mississippi than our ideal idea of Lake Erie water.

It has thus been the custom of those who advocated the new waterworks system to ignore either through ignorance or no desire to know the actual physical conditions which would aid in proving the safe character of the water at the old intake site.

They were not seeking, but evading the truth.

My current observations were ridiculed, but as time demonstrated the value of the truths unfolded by them, the army of investigators made good use of the report to Mayor Knight, adopted their findings, without giving the first demonstrator of this interesting natural condition the least credit for his work.

SOURCE OF TYPHOID FEVER AT BUFFALO.

By the pessimistic commission of the Erie County Medical Society, about all the typhoid fever is credited to the water supply, which twenty-five years ago would have been looked upon as reasonable.

No credit is given the *Musca Domestica*, the human typhoid carrier, or the nearness of one of the greatest typhoid centres in the country, Niagara Falls and adjoining cities, contaminated by the sewage of Buffalo, or any consideration given the large moving summer population along the Eastern shore of the river, directly north of Buffalo, which revels in the sewage always along this shore. Again there should be obtained so far as possible the source of contagion affecting the patients of the city.

Some years ago I took the trouble to enquire of three hap-hazard convalescent patients as to the source of their fever.

One had been in Pittsburg, another at Niagara Falls, and the third had been travelling between Tonawanda and Buffalo, these were undoubtedly statistically credited to our water supply.

SUM IT UP AFTER CAREFUL STUDY.

It amounts to this—if the tunnel from the new intake is free from seepage, the water pumped to our city supply will be as good as can be obtained at any point in easterly end of lake. If not, the construction of new tunnel and intake was useless or worse, as a *better*, feasible and *much less costly* plan could have been provided, without this danger, as I have shown, or just as good water could have been obtained at the shore end of the old intake tunnel. In this event a filtration plant on account of the seepage, would have been required, or only a sedimentation basin if the tunnels were made impervious to seepage.

FINIS.

To understand this subject clearly, it must be studied in detail. My report to the city, Common Council proceedings, June 29, 1903, paper in the *Journal American Medical Association*, September 3, 1910, are suggested.

To those who believe that Lake Erie is fast becoming a "Foul cess pool" I commend the "Report of Streams Examination," Sanitary District of Chicago, Chemic and bacteriologic examinations, made under the direction of Arthur R. Reynolds, Commissioner of Health Chicago, and give heed to its conclusions. The panacea for all is,

PREVENT THE BEFOULMENT OF ALL NATURAL POTABLE WATER WAYS.

See paper by the author, *Journal American Medical Association*, December 23, 1911. This good work is being systematically carried out by the disinfection of stools at the bedside, and the following paper is really the beginning on a systematic plan of the prevention of befoulment of potable water ways, and as I long ago suggested, sensibly begins at the bed-side of the patient—the first point in the battle against typhoid fever.* This, with the anti-typhoid vaccination, so successfully adopted by the U. S. Army and beautifully set forth by Major Frederick F. Russell, U. S. A., at the meeting of the Medical Union in this city last January, will result in the virtual banishment of typhoid fever from every civilized country on the globe.

Results from Use of Dowd's Phosphatometer and Tonic.

Chauncey P. Smith, M. D. (Univ. of Penna.)
Buffalo.

AFTER two years work with Dowd's Phosphatometer, its findings and his remedies to correct pathological conditions presented by its use, I would submit the following conclusions based on thirty cases observed.

For some reason in the analysis of urine—the element phosphorus seems to have been neglected, while various other constituents have been unduly emphasized and enlarged upon although their clinical significance has never been made clear. This is more extraordinary as physiology, chemistry and zoology have definitely shown that of all the elements, phosphorus stands

* "A Practical Method for the Control of Typhoid, as applied to the Water Shed of Baltimore. By Marshall Langton Price, M.D., William Royal Stokes, M.D., and C. W. G. Rohrer, M.D., Baltimore. *Journal American Medical Association*, January 20, 1912.

as the keystone in the arch of chemic compounds forming the basis of life. It need only be mentioned that the dominant element of the brain and spinal cord which govern tissues of a lower plane, and of the semen reduced to their ultimate component is phosphorus. In all experimental work for the production of life, biology points towards this all important substance. Remembering these facts which have been known to workers in the sciences of plant and animal life, is it not singular that they should have escaped their relative importance in the science of medicine?

Dowd's Phosphatometer is an instrument whose technique is simple and by means of which the estimation of the amount of phosphorus eliminated can be made in a short time. All urine examined should be subjected to this test as a matter of routine as to my mind it is of greater clinical value in a greater number of cases than the test for sugar.

The clinical cases in which it is of great benefit may be divided by the analysis of the urine into two groups: A. Those with phosphatic excess or waste. B. Those with deficient amount of phosphorus in a body as a whole.

Class A. Those with phosphatic waste. Clinically symptoms complained of are loss of appetite, insomnia, mental unrest, irritability, "temper on edge," "patient carries his business to bed." Does not feel well but cannot give symptoms in an orderly sequence which would point to some disease. The phosphatic index is high, often being 150 plus.

Class B. Those with decreased phosphatic index. Clinical symptoms being loss of energy, cannot "eat" up as much work as formerly, "all in" at 3-5 in the afternoon, tired, sleep does not refresh, vague indefinite pains and accentuation of any ailment or chronic condition to-wit: if patient has headaches they will become more frequent and appear at shorter intervals; if stomach is irritable—it becomes more so—any weak point in the anatomy is brought to the foreground with this condition.

Class A. Clinical Cases. 1. T.G.S. aet. 70. Symptoms chronic gas formation with cardiac oppression in consequence. Attacks have absolutely no relation to character of food or time of eating. Could not walk a block without stopping to regain breath; nitro-glycerine would give relief by causing belching; mental despondency; irritable—would put overwhelming importance on trifles. Phosphatic index 175 plus. Patient was given appropriate remedies for five weeks to decrease phosphatic elimination. At the end of that time the phosphatic index was normal. Symptoms subsided; wife said "patient was better than he had been for five years."

Case 2 Jew aet. 34. Manager of clothing store. Complained of loss of sleep—would get up seven or eight times a night and smoke in effort to quiet himself; was irritable so much that his clerks complained; no appetite; worried; face lined; loss of weight in past six months.

Phosphatic Index 175 plus. Appropriate medication. After a progressive betterment of all symptoms, patient was discharged well in five weeks.

In all these cases that which is very gratifying to a physician, is that one can prognose 30 per cent. improvement in two weeks and get it. Again by analysis of the urine one can accurately speak of patient's condition without information from patient. Many times to test out this, I have asked patient to say nothing until urine was examined when I would say "you are 50 per cent. better" and this statement would be confirmed by the diminution or cessation of the various ailments originally complained of.

Class B. Those with deficient amount of phosphorus in the body as a whole.

Case 1. The most striking and accurate history is that of my own condition. For five weeks I had lassitude, tired at 3 P. M., spent most of the time on the sofa, no ambition, sleep did not refresh; food had no attraction. Finally I saw Dr. Pryor who found I had a temperature of 99.5 degrees. Said no doubt I had been running temperature for a fortnight or more. Was put to bed. Physical examination negative; Widal test negative; urine negative; blood count negative; diagnosis negative; Hydrochloric acid and nux ordered and taken for a week; no marked improvement; still indifferent to food, work, weather, interests. On own initiative bought some of Dowd's tonic as I had heard most extravagant claims of its virtues from him. Sceptically and indifferently I began taking it at 5 P. M. and within an hour felt better. At dinner that night the family—who are close observers—said that I seemed more like myself than I had for some time. Briefly in three days I was myself.

I have used this tonic in a number of cases and when judiciously given immediate and permanent results can be looked for. I have seen and heard of slow healing wounds being quickened; of obstinate corneal ulcers cicatrizing; of coughs that hang on, disappearing.

The evidence to my mind is very clear that in this phosphorus mixture of Dr. Dowd we have a very important addition to our armamentarium and particularly in those cases where we used to be at sea as to what to do and chiefly did nothing.

69 CHIPPEWA STREET.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

AT MITCHELL'S STATION.

Saturday, September 19, 1863, I started for the front this morning, reaching Culpepper about five o'clock P. M., where I remained over night. On the following morning, Sunday, I joined the command near Mitchell's Station, which is the last R. R. station before the O. & A. Railway crosses the Rapidan. Our camp is near the Rapidan River, and the rebel camps are in plain sight of my tent on the heights opposite. We are ten miles from our last camp at Morrisville. I am still with the hospital though we have very few sick, most of them having been sent away before the move.

September 22. We are in plain view of the rebel batteries on the opposite side of the Rapidan, and from their position they could shell our camps if they saw fit. The cavalry has been fighting on our right, apparently near Madison C. H. We have orders for eight days' rations and to be in readiness to move at a moment's notice, which looks like work soon.

September 25. Our sick were sent off today to Culpepper C. H.—another indication of a move. One of the enemy's signal stations is plainly visible, and I see their flags waving at all hours of the day. I have a Richmond paper of the 23d, which says Longstreet's and Hill's Corps are out west opposing Rosecrans, and claiming a great victory for their side at Chickamauga on the 19th. The 11th and 12th Corps from this army have been sent west to reinforce Rosecrans, which reduces our status to a strict defensive.

September 27. We don't move yet, but the indications are that we shall soon fall back towards Alexandria. The enemy is on the alert, feeling our flanks, and may precipitate a move at any time; at all events, there is much mystery in the situation as it appears to me.

September 30. Still waiting and hourly expecting, but no definite orders to move as yet. I have been two years in the service, the 2nd anniversary of my muster-in having occurred the day I left home two weeks ago. One year yet remains before

my term expires, and who knows what it will bring forth? Time alone can answer the question, and it only remains for me to do my duty to the best of my ability, trusting the result to Him who "Doeth all things well."

October 2. It has rained steadily for the past twelve hours, and altogether it is one of the most disagreeable days I have known for a long time. Yesterday we had a little excitement in the way of a horse race at Mitchell's Station, between a horse owned by Captain Rose, Commissary of the Third Brigade, and one belonging to the staff of Corps Headquarters. Colonel Smith, Chief Commissary of the Corps; and myself were the judges, and Rose's horse won by half a neck. The rebels looked on from the heights opposite, quiet and interested spectators. Today a man was shot in this Division for desertion—the first execution in the First Division. I have had my horse mustered into service at a value of \$225.00, so that I can recover in case he is killed. We have been troubled for supplies for our mess since we have been here, but tonight we are to dine upon roast pork, mashed potatoes, onions, etc.

October 4. Today has been a beautiful day—in marked contrast to the weather lately, and especially to Friday last.

October 7. We were relieved on the 5th from our uncomfortable and dangerous position at the front by the 6th Corps, and yesterday retired, to Culpepper C. H., where we are now encamped. It is raining quite hard again, and we have just received orders to send away our sick tomorrow, which looks like activity again. Dr. Letterman, Medical Director of the Army of the Potomac, goes North tomorrow to be married.

October 10. We moved our camp a short distance yesterday, and are again ordered to move immediately.

AUBURN AND BRISTOE.

October 11. Sunday, five o'clock P. M. We have been on the march since twelve o'clock last night, and have just reached Beakton Station on the north side of the Rappahannock. The army has evacuated Culpepper by this time, as the last train on the O. & A. R. R. has just passed here for Alexandria. What the movement signifies I cannot say, but it looks as if the enemy was upon our right flank, and we would retreat towards Alexandria in the morning.

October 16. We have been constantly on the move since Monday, and fighting a good part of the time. The Army of the Potomac is back at Centerville, and the 2d Corps was the rear guard during the movement. It appears that Lee's army got upon our right flank, as was intimated probable a little way back, and we were obliged to march fast, fight a good deal, and manœuvre still more to save ourselves and our trains: but we

did it and, besides, made the enemy pay dear for the trouble it put us too. On Monday, the 12th, we recrossed the Rappahannock, moving from Bealton to Brandy Station, but found no great force of the enemy there, as was expected. We came back and bivouacked at Bealton late that night, and Tuesday morning moved in the direction of Warrenton. At nine o'clock P. M. we bivouacked in a cornfield near Auburn, not over 400 yards from the enemy's pickets, building large fires to deceive them as to our numbers, and starting next morning at daylight, with the expectation of reaching Catlett's Station in two or three hours. The enemy, however, planted a battery across our path, and shelled the First Division while cooking coffee at Auburn. I had a large load of sick in the ambulances, and they shelled our train pretty severely, driving back the cavalry on our flank. I thought at one time our whole train would be captured, but the First Division charged and drove off the rascals in season to save it. General Warren now came along to the head of the train, and gave orders for it to give way to let a battery pass, which was soon put into action and did good work. I was obliged to unload the sick and take on the wounded, which I brought safely to Centerville after dark. We passed Catlett's Station near noon, where I saw General Meade, staff, and escort drawn up in line.

At Bristoe, just at nightfall, we had another encounter with the enemy, who sought to cut off our retreat by getting possession of our road, where it intersects the one they were moving on. But the 2nd Division was pushed forward, seizing the R. R. cut which served as a breastwork, and gave them a terrible threshing. We captured five guns, two colors, and over four hundred prisoners, retiring afterwards to Centerville under cover of the darkness.

I was busy all night operating and dressing the wounded, with but one Assistant Surgeon, relying upon the hospital stewards and nurses for further aid. I amputated an arm for a cavalry captain about two o'clock A. M., who thought he could not endure the suffering until morning. Next day, Thursday, the 15th, we were ordered to send the wounded to Fairfax Station for shipment to Washington, and one poor fellow, Rose of the 57th, who was suffering so from shock that we thought best not to operate upon him, must now receive attention; so, upon Dr. Dougherty's advice, I amputated his right thigh and left arm, four men holding a rubber blanket over the table to keep the rain off, while the operation was being made. The train had gone on, but I kept one ambulance back to take him, and after the operation he was put carefully aboard, given half a glass of brandy, and sent on to overtake the others. Just as the am-

balance was moving off he asked: "Doctor, you think I'll get well now, don't you?" And, sure enough, he did recover. This case is reported in the "Medical and Surgical History of the War," Part Second, Surgical Volume, Page 611, and Part Third, Surgical Volume, Page 253.

Today, Friday, 16th, I am not well from an attack of colic. It has rained ever since yesterday when I was operating on Rose. The Corps is in line of battle, and everything looks gloomy enough.

Sunday, October 18. We have been here at Centerville since Wednesday night, but I fancy we'll not stay much longer. The movements of the past week have given the Second Corps new honors, and General Meade has complimented us in orders. Today has been the warmest and pleasantest day we have had for a long time.

October 21. Near Auburn. I was in the saddle thirteen hours yesterday. We left Centerville Monday morning (the 19th) early, in a terrific rain storm, and marched to Bristoe Station, where one of our battles was fought a week ago today. Yesterday we moved up here, which is about half way between Catlett's Station and Warrenton. The exact spot where we are now encamped is the scene of our first battle of this day week, when the rebels attacked my train early in the morning. Night before last it was reported that Hill's and Ewell's corps were at Warrenton, and last night it was reported that all the rebel forces had recrossed the Rappahannock about two hours before we arrived here. I am inclined to credit this last report, as we are not moving today, as we probably would be were they this side of the river. They have entirely destroyed the R. R. from Bristoe Station to Warrenton Junction, and I presume as far as the Rappahannock too. The day is very warm, but I feel almost sick with a sore throat. I took cold at Centerville, and am still suffering from its effects. I saw Custer on the march yesterday at the head of his Cavalry Brigade, clad in velvet and gold lace, his locks waving in the breeze—a perfect Murat in manner and appearance.

October 24. We moved about five miles on the '22nd, and are now encamped on the Warrenton R. R., midway between Warrenton and Warrenton Junction. I went up to Warrenton day before yesterday on a pleasure ride, where I saw the 6th Corps. They always appear to get a good place somehow, but have less actual fighting than the 2nd Corps. Division hospitals have been temporarily abandoned, but I still retain charge of the ambulances and the ambulance Corps.

I have been appointed one of the chief operating surgeons of the Division (of whom there are three), which, however, will

not interfere with my charge of the ambulance corps. I presume this appointment was made on account of my conduct at Center-ville. The Medical Director, Dr. A. N. Dougherty, spoke in complimentary terms thereof, not only to me personally, but to others who have mentioned it to me since. My appointment is to fill a vacancy occasioned by the resignation of Surgeon C. S. Wood, 66th New York, who has been appointed Medical Director, Department of the Pacific, with headquarters at San Francisco.

October 26. Yesterday we changed our camp a short distance to get out of the mud, and now have a fine place in a dry pine grove. The weather today is like a northern autumn. We have just received instructions to pack up and get ready to move at a moment's notice.

October 28. We did not move day before yesterday as expected, and are still here in the pine grove. Today we are having a fireplace built in our tent, so we expect to be comfortable tonight with an indoor fire. My cold is not well, but am better.

October 30. We captured a camera at Morrisville last summer, and a few days ago obtained chemicals from Washington, and are now in full blast taking tintypes, which affords entertainment, as well as useful employment. Our fireplace is a success, the chimney does not smoke—a wonder—and everybody is happy. Dr. Brower Gesner, of the Third Division Ambulance Corps, is chief photographer, and I act as assistant. Captain Livermore, chief of ambulances for the Corps, Lieutenant Pelton, of the Third Division train, and two officers of the Second Division Corps, are with us every day, sitting for their pictures in all sorts of groups and positions. A photograph in my military album shows a group of the ambulance officers, and it was copied from one of the tintypes that we took at this time.

Saturday, October 31. The weather is very fine, and we are quite comfortable with our fireplace to warm us at evening. The month closes with the uncertainty of a possible movement of the army at any time, but in comparative quietude for the moment.

The Rochester Public Health Association.

THE work of the Rochester Public Health Association is assuming such proportions, that the present quarters are entirely inadequate. The immediate cause of the work is due to the revival of the General Clinic, through which all children must go before they are assigned to a special clinic. This general clinic acts as a sort of clearing house, so that no abnormal condition, which has a tendency to lower the resistance of the child, is overlooked. Schedules of the clinics have been sent to

all teachers and principals of the schools and to the mother's clubs, and through these sources a large number of children come to the Dispensary daily. A pamphlet is being prepared, giving to the teachers and mothers the symptoms of conditions which are treated at the Dispensary. Abnormalities of the eye, ear, nose, throat, nervous system, osseous system and early symptoms of tuberculosis are briefly touched upon in such language that it is readily understood.

Children predisposed to tuberculosis, those anemic and poorly nourished are being cared for by the Open Air School. This school is conducted by the Board of Education of the City of Rochester and the Rochester Public Health Association. The report for the last term, September to January, shows an average gain in weight of 4.925 pounds, and a total gain of 147¾ pounds. There was no child in the school who lost weight. Many children are constantly being returned to the public schools, where they take up the work of the same grade they would have been in, had they remained in the public school. The increase in percentage of haemoglobin had been gradual and apparent in almost every child, undoubtedly due to the regime of fresh air, rest and additional food.

The tuberculosis clinic shows a gradual increase in the number of visits to the Dispensary and also in the number of visits made by the tuberculosis visiting nurses. The most striking feature of this clinic is the large percentage of family cases which are found to be tuberculous. This has varied from 10 per cent. to 40 per cent. of those examined. This represents examinations of persons in the families in which there exists a known case of tuberculosis.

There is close co-operation between the Rochester Public Health Association and Iola Sanitorium, the County Tuberculosis Hospital of Monroe County. Cases are discovered through the Health Association and sent to the Hospital for treatment. When discharged from the Hospital, they are placed under the supervision of the Health Association. Every admission into the Hospital is reported to the Health Association, which immediately sends out the tuberculosis visiting nurse to the house occupied by the patient. Here proper methods of disinfecting are carried out and an attempt is made to get other members of the family to come to the Dispensary. In return a report is made to the Hospital as to the condition of the home and other members of the family. The Hospital is already accommodating nearly 100 patients and has a capacity but for 60, and there now exists a large waiting list.

A schedule of clinics and a roster of the physicians of the Dispensary Staff shows the scope of the work.

E. G. WHIPPLE, M. D.,
Executive Secretary.

SOCIETY PROCEEDINGS

Elmira Academy of Medicine

AT the regular meeting of the Elmira Academy of Medicine, hold on March 6, 1912, the following amendment to the fee bill was unanimously adopted.

"We recommend the adoption of an amendment to the fee bill making the minimum charge for an examination in lunacy \$15.00 and the minimum charge for an autopsy \$20.00, for each physician.

We also recommend that the Board of Supervisors be notified of this action.

THE Elmira Academy of Medicine will hold its regular meeting on April 3, 1912, at 8.15 P. M., in the Society rooms, at the Federation Building.

Program—"The Relation of Immunity to Serum Therapy," LaRue Colgrove, M. D.; "My Experience with Salvarsan," N. H. Soble, M. D.

HERBERT W. FUDGE, M. D.,
President.

CHARLES HAASE, M. D.,
Secretary.

DR. A. L. BENEDICT and Dr. R. Montfort Schley entertained the Buffalo Association, Sons of the Revolution, at the University Club, on Thursday evening, March 28th, 1912.

Mr. Robert M. Codd, Jr., B S—LL-B., spoke on "The King's Loyal Americans."

THE Buffalo Association of the University of Rochester Alumni numbers amongst its members the following physicians residing in Buffalo and vicinity: Dr. George R. Stearns, Class of 1875, Dr. William H. Thornton Class of 1879, Dr. J. W. LeSeur of Batavia, Class of 1882, Dr. A. L. Benedict, Class of 1887 (but graduated at Michigan), Dr. Herman K. DeGroat, Class of 1892; Dr. L. Kauffman, Class of 1896. Dr. Benedict was elected second vice-president and Dr. Kauffman secretary for the ensuing year.

Medical Society of the State of New York.

THE 106th Annual Meeting of the Medical Society of the State of New York will be held at Albany, Tuesday, Wednesday and Thursday, April 16-18, 1912. Tuesday morning there will be the addresses of welcome, etc., followed by a half dollar luncheon at German Hall. This year, the scientific sessions will be by sections, Medicine, Surgery, Mental and Nervous Diseases, etc., Public Health and Eye-Ear-Nose-Throat, each of which will hold one session Tuesday and two each on Wednesday and Thursday, except that the Medical and Surgical Sections will meet together Thursday morning for symposiums on Infantile Paralysis and Hyperthyroidea and that The Medical and Specialty Sections will meet together Wednesday afternoon for a symposium on Vertigo.

Tuesday evening, there will be a public meeting in the Assembly Chamber, with addresses on Prophylaxis as follows: Blindness, Dr. George E. de Schweinitz of Philadelphia; Deafness, G. Hudson Makuen of Philadelphia; Insanity, Albert Warren Ferris of Watkins; Tuberculosis, Homer Folks representing the State Charities Aid Association, of New York.

Wednesday at 2 o'clock, John M. T. Finney of Baltimore, will deliver the surgical oration on the Duty of the Family Physician in the Management of Surgical Cases. At 8 o'clock, Walter B. Cannon will deliver an oration on the Benefits of Vivisection. At 9 o'clock, there will be the President's reception, dance and supper at the Hotel Ten Eyck (\$2).

We regret that space is lacking for the entire program whose greatest value lies, as usually, in the routine papers presented to the sections.

THE Buffalo General Hospital Internes held their annual banquet March 10, at the Lafayette Hotel. Dr. J. W. Putnam delivered an address on Expert Testimony. Dr. DeLancey Rochester was toastmaster, and among those who responded were Dr. H. U. Williams, Dr. Clayton M. Greene, and Dr. E. L. Shurley of Detroit.

The Buffalo Medical and Surgical League was organized on Thursday night, March 14, at the Lafayette Hotel. Officers were chosen as follows: President, Dr. A. W. Hengerer; vice-president, Dr. M. Allen Richter; secretary, Dr. Julius Richter; treasurer, Dr. Edmund P. Reiman; board of governors, Dr. George A. Stesel, chairman; Dr. Francis O'Gorman, Dr. Robert S. Taylor, Dr. Wilhelm Brauns, Dr. George Seitz. The promulgation of the code of ethics of the American Medical Association is one of the objects for which the league is formed.

TOPICS OF PUBLIC INTEREST

THE MONROE COUNTY COMMITTEE ON MENTAL HYGIENE, was organized March 14, 1912, by a public meeting composed both of physicians and laymen.

County Judge John B. M. Stephens was selected to serve as president of the committee, Dr. E. B. Angell, George H. Smith and Dr. Thomas O'Hare as vice-presidents, and Dr. E. L. Hanes as secretary and treasurer.

The committee will endeavor, through public lectures and the dissemination of information through various channels, to teach the essentials of mental hygiene and to provide means for proper and adequate treatment for incipient cases of insanity in special wards at one or more of the city hospitals, and will co-operate with the Central Committee on Mental Hygiene of the State Charities Aid Association, which is a section of the National Charities Aid Society, for the prevention and cure of insanity.

The first lecture meeting was held March 28, with the following program, Dr. Edwin H. Wolcott, Presiding.

"The Causes and Treatment of Mental Diseases," Dr. Smith Ely Jelliffe, New York City. "A Plan of Campaign," Mr. Everett S. Elwood, New York City. "Rochester's Need of a Psychopathic Ward from a Medical Point of View," Dr. Edward L. Hanes. "Rochester's Need of a Psychopathic Ward from a Legal Point of View," Judge J. B. M. Stephens, General discussion.

BACTERIOLOGIC EQUIPMENTS.—Last month, we noted the farming out of the bacteriologic work of Monroe County to a practicing physician. The city of Buffalo started 5 years ago with an appropriation of \$600 for equipment. On this annual allowance, the number of tests has increased from 7,660 to 25,160. It is now proposed to double the annual appropriation and to ask something less than \$700 for a special appropriation for apparatus. Chicago pays \$5,000, Toronto \$4,000, Baltimore \$3,500, Cleveland \$3,000, Des Moines \$2,500, Birmingham Ala. \$2,000. Major Bissell has done good work with the poor equipment thus far granted him. We need not argue in behalf of his department. Efficiency of this kind was noted and the proper reward suggested many centuries ago. "Well done, good and faithful servant; thou hast been faithful over a few things. I will make thee ruler over many things."

OXALIC ACID POISONING.—The death of eight infants in the Brooklyn Nursery and Infants' Hospital, by oxalic acid placed in their food by a woman jealous of the nurses and wishing to make them trouble, is a shocking incident. Naturally, the question of her sanity has arisen. In and of itself, the incident does not necessarily imply lack of sanity, but merely ignorance and lack of perspective. The smart jay who daubs a dog's anus with turpentine and shoves the poor beast into a church social; the colored girl seeking a love philtre; the author or dramatist who, as an item in the development of a plot, puts some one to sleep with a safe drug—which the profession would be glad to possess—; the thrifty layman who considers that the "Do not repeat" on a prescription is a form of medical graft; all belong in the same category with the unfortunate woman who has unwittingly dealt death to these little ones. Is there not some way to impress on the laity that drugs are not to be fooled with; that a little knowledge of them is a terribly dangerous thing?

THE University of Buffalo celebrated "University Day" at the Teck Theatre, on Washington's Birthday. Dr. Roswell Park delivered the address.

MOUNT Morris has recently voted appropriations of \$140,000 for water supply; \$45,000 for sewerage.

THE State Board of Regents has rescinded the agreement to endorse Vermont medical licenses, on the ground that the Vermont requirements do not come up to the New York standard. New York, by the way, is very far below the requirement of many western states in regard to general educational requirements, though relatively high on purely technical requirements. According to precedent, the action of the New York regents means also, that New York licenses will not be honored in Vermont. "Reciprocity" is a poor basis for establishing educational and medical attainments. A few years ago the examining board of one of the western states took the dignified and honorable stand that it would recognize the license of any state having an equal or *higher* requirement, and that it would not retaliate upon individuals for the action of a state board, in maintaining a standard which the state in question has not yet attained. Illinois, also, is being cut off the reciprocity list of some states on account of its failure to maintain a high standard.

JOHN MORG, died at his home on Indian Creek near Columbia, Ky., February 23, 1912. He was a veteran of the War of 1812.

He immigrated from Germany in 1812 and enlisted, giving his age as 24. He was probably the oldest man in the United States up to his death.

BACTERIOLOGIST, PHILIPPINE SERVICE.

A research bacteriologist will be appointed at a salary of \$2,500, subject to the usual perquisites and promotion. Eligibles may also be selected to fill similar vacancies which may arise later. The customary requirements hold as for most government appointments. No formal examination will be held but the selection will be made on investigation of credentials, theses, etc., presented by the applicant. Those interested should apply to the U. S. Civil Service Commission, Washington, D. C., asking for Form B.I.A. 2.

DR. HARVEY W. WILEY has resigned, presumably because of friction with the members of the Department of Agriculture who failed to have him ousted. Moral, for the medical profession: Keep out of politics. Dr. Freer of the Philippine service is mentioned as a possible appointee and President Taft has instituted a general inquiry among colleges for available men.

ASIATIC CHOLERA.—Naame, a French physician at Tunis, has cured all of a series of 20 cases, using intra-venous injections of adrenalin. The Pasteur Institute endorses his discovery.

SMALL POX.—Dr. Grover W. Wende discovered a case in a traveling man, in a Buffalo rooming house. The patient came from Grand Rapids but is supposed to have contracted the disease in a hotel in Kalamazoo. Dr. Charles F. Durand of the Quarantine Hospital states that while the patient gives a history of attempted vaccination, it was not successful and no scar is evident. In fact, in an experience of about 70 cases at the hospital, he has never encountered a case that had been successfully vaccinated. Conversely, some fifteen or twenty exposed individuals (mothers accompanying infants or vice versa), immediately vaccinated and remaining at the hospital, have escaped infection. Here are some hard facts for the anti-vaccinationists to explain.

THE *Medical Union*, one of the oldest medical organizations in Buffalo, held its monthly meeting at the Statler Hotel, February 28, 1912. About 25 members and guests were present. Dr. Clayton M. Brown was the host of the evening. After dinner, Dr. George F. Cott delivered his address as incoming President, emphasizing the practical value, even in achieving professional and scientific advances, of social acquaintance and harmony, as fostered by such societies as the Medical Union.

Dr. George H. Westinghouse then read a brief but complete resume of the laws regarding abortion. The discussion took up various ethical phases of the same subject and several speakers dwelt on the criticisms which had been made of the agencies employed by the Censors of the Society of Erie Co., emphasizing the necessity of using such means as were available. It seemed to be the general experience that, whether convictions were obtained or not, the men who had formerly done much abortion practice had desisted and that patients now had a long hunt before they could find anyone to perform an abortion.

Wild Parsnip Poisoning.

ONE death and a number of cases of acute poisoning are reported from Perry, under date of March 19, due to wild parsnip, dug by one of the children. Wild parsnip is regarded by most botanists as identical with the cultivated vegetable and was probably introduced from Europe, though some consider it as indigenous. Even the cultivated parsnip contains some toxic material, especially in the outer parts of the plant. *Opopanax*, another species, originally from south-western Asia, has been used in medicine as an antispasmodic but is now practically discarded.

All of the umbelliferae are more or less poisonous, some dangerously so. The compound leaves and globular or disc-like clusters of flowers are so characteristic for the whole family, that it should be easy to warn children against them, by an easily remembered general description.

The mints, though valuable as minor remedies, are not usually regarded as strictly poisonous. However, the writer has seen syncope, apparently of dangerous degree and length of cardiac depression and temporary deafness from a teaspoonful of the oil of peppermint. It is not at all likely that a child would eat enough of any mint to absorb a large dose of any volatile oil. Still, as in the case of the umbelliferae, a fairly accurate general description of the whole family of mints can be set forth as a warning.

Many kinds of mushrooms are poisonous and none of the ordinary distinguishing tests between toxic and non-toxic kinds, are at all reliable in either direction. Children should be taught (and grown persons too) that only those who have given expert attention to the study can distinguish between edible and toxic species, and that the distinction rests on no general rules but on personal acquaintance.

Poison ivy produces much discomfort, occasionally serious lesions though, on the whole, its danger is exaggerated. Child-

ren can easily be impressed with its distinction from Virginia creeper. Tell them that the vine with five leaflets, like the fingers of the hand, can safely be taken by the hand but that they must not shake hands with the three-leafleted vines.

Deadly night-shade, can easily be described by the peculiar bright berry and the various shaped leaves. But all the solanaceae, even the potato, tomato and egg plant, are poisonous in their green parts.

We are very rusty on botany—not that we love nature less but ancient remains of man, more, so that the limited time that the busy man can spend in the fields and woods has been otherwise occupied. But among our readers there must be many who can sum up the poisonous plants of this region, classify them and give brief descriptions which physicians generally can pass on to children and grown persons no wiser, in time to protect them against the temptations of growing plants during the coming summer.

CORRESPONDENCE

Arizpe, Sonora, Mexico,
February 23, 1912.

Editor BUFFALO MEDICAL JOURNAL:

I received copy of JOURNAL requested and will send in my subscription just as soon as our post office is allowed to issue money orders again. We are having lots of trouble lately with Revolutionists and it is difficult to get money through the mails. However, I will send in my subscription as soon as possible. Your JOURNAL is one of the best for the practitioner, printed. Thanking you for your prompt reply, I remain

Yours respectfully,
J. M. HIGGINS.

(Note: While the BUFFALO MEDICAL JOURNAL aims especially to serve as a local medium for western New York, we frequently receive orders from quite distant points, including Central and South American countries, South Africa, etc. Some of these orders, it must be confessed, come from professional "samplers" in our own country but most of them are bona fide and fully half are from men who, so far as we can discover, have no local affiliations. We hope later to hear some of Dr. Higgin's experiences.)

Unfair Discrimination.

51 W. 70th St., March 25, 1912.

Dear DR. BENEDICT:

I hope the inclosed may move you to advocate concerted action by medical societies to obtain a decision by the highest courts on this flagrant injustice of state laws against educated practitioners.

Yours sincerely;
S. BARUCH.

DR. BARUCH'S inclosure consists of a very friendly editorial in the *N. Y. Sun* of March 17, 1912, entitled *The Physician and the Public*, and deprecating the unfairness of the present laws in many states in which the rigid requirements for the regular physician are placed side by side with easy conditions for all sorts of charlatans. "It is indisputable that the physician is the only real altruist in any community" says the *Sun* (of course, only in the sense of a type of a profession). Reference is also made to many acts of medical heroism and to the customary charity of the profession.

We are strongly of the opinion that a fair deal, all over the country, for every man, will not be obtained till we have one set of laws as well as one flag. The license laws, for example, are most unjust and can scarcely be placed on a fair basis by state legislation.

There is one thought that occurs to us regarding the particular matter to which Dr. Baruch alludes: We do not want to lower the requirements for the regular medical student, graduate and licenciate. If it is necessary, in response to the specious plea of fairness and broad-mindedness, to provide for the license of Christian Scientists, osteopaths, optometrists and "that all tribe" as it is so well expressed in Latin, do we really want to take them seriously enough to require that they shall be educated and trained for so many years in what corresponds to our technical schooling? How far do such practitioners of a substitute for medicine really compete with us? If competition must be considered, will it be increased or diminished by educating charlatans? If charlatans make work for the regular profession, will the public be safe-guarded by requiring that the various psychic and physical means employed be drilled in by longer terms of study, and that the irregular practitioners use better grammar, know more history, etc? Certainly something should be done and we would be glad to print the views of our readers.

Bulletin of the Buffalo General Hospital

VOL. I.

APRIL, 1912.

No. IV.

Resolutions

At a special meeting of the Board of Trustees of the Buffalo General Hospital, held immediately after the death of Mr. Pardee, the following memorial was adopted:

By the death of Charles W. Pardee, The Buffalo General Hospital has been deprived of the services of one of the most valued and efficient officers with which it has been blessed in the half century of its work. During that time many men of marked ability have given largely of their valuable time and services to the work of the Hospital, and have served with fidelity and zeal, but among them all, the signal services and extraordinary and continued labors of Mr. Pardee stand out prominently. Mr. Pardee acted as Secretary and Trustee during the years 1888 to 1891, and in the year 1904 was again elected Trustee and President of the institution, serving continuously in that capacity up to the day of his death.

During all that time his interest in and ardor for the institution knew no bounds and suffered no lapse. He gave unsparingly at all times of his means, and his personal attention and services were constantly and continuously applied to every interest and detail of the institution.

During his service and under his personal direction the hospital made remarkable progress in all lines of its work and equipment. Many improvements owe their existence to his initiative. He was at all times a close student of all matters pertaining to the betterment and conduct of hospitals, and applied himself to the scientific and technical work in connection therewith. Prominent among his ambitions for the hospital was the beautifying of the buildings and grounds, and much was accomplished along these lines under his direction. These, together with the pathological laboratory installed at his expense, will continue to stand out prominently among his many benefactions.

His work continued unabated up to the day of his death, and this Board desires to express its deep sense of personal loss, as well as the great loss suffered by the institution.

Resolved, that this memorial be spread upon the minutes of this meeting, and an engrossed copy sent to his family, together with the sympathy of this Board.

The following resolutions were adopted by the staff:

At a meeting of the Staff of The Buffalo General Hospital, March 18, 1912, the following memorial was formally adopted:

The Medical Staff of The Buffalo General Hospital has realized ever since Mr. Charles W. Pardee became President of its Board of Trustees, how greatly they were indebted to him.

not only for the cordial and reciprocally helpful support which he has ever accorded to them, but for a deeper and more sympathetic appreciation of our efforts toward our common purpose than is usually expressed by lay officers of a medical organization or hospital.

We feel that, in so far as was possible, he has realized our needs and ambitions, and know quite well, that his purse has ever been open, when hospital funds were insufficient or unavailable.

We realize, too, that it is largely due to his untiring energy and ceaseless zeal, that the Hospital has been able to accomplish so much, and to be entitled to its present position among similar institutions of this country: a position in which we all take the greatest pride. Few officers have been willing to give daily and constantly of their time as did Mr. Pardee, to the minutest details.

We understand something of the efforts which have been required on his part to effect many of our recent improvements, and to place the institution upon a satisfactory financial footing.

From every direction then, we are made to feel, what a serious blow has fallen upon us and upon our Hospital, and feel that we should be unjust to ourselves and to Mr. Pardee's memory, did we not spread upon our minutes this testimonial to the great value alike to the institution and to the community at large of those services which he so capably and so generously rendered.

And we wish, not only to transmit to Mrs. Pardee and his bereaved family our expressions of deepest sympathy, but to give public utterance to our own feelings and of our own appreciation of his devotion to the Hospital.

In the Pardee Laboratory.

UPON entering the hospital, each case has an analysis made of a single sample of urine. This analysis is made and the report written on the chart the next morning, so that the attending physician or surgeon is informed when making rounds.

The morning after the patient's arrival at the hospital a twenty-four hour sample is started. In its analysis, the total amount is measured, color noted, reaction taken, specific gravity, total solids and urea estimated; tests for sugar and albumen are made and the per cent. given; the presence of indican and, at times, acetone, and the amount of chlorides are estimated. After this, part of the sample is centrifugalized and the sediment examined microscopically for casts, red and white blood cells, epithelial cells, crystals of various kinds, etc. If pus is found, smears and cultures are made from samples collected under sterile precautions, and the offending organism isolated. From these cul-

tures of bacteria autogenous vaccines are made in suitable cases. Frequently organisms suspected of being tubercle bacilli are found in samples of urine. In these cases animals are inoculated with the urine and watched for symptoms of tuberculosis.

A careful urine analysis is often the key to the solution of an obscure case. At the present time the laboratory averages three hundred single samples and four hundred twenty-four hour samples per month, with about thirty urine cultures.

Stools are examined for undigested foods; bile pigments, which are often absent in cases of gall stones; occult blood, which frequently gives a clue to ulcers and malignant growths in the intestinal tract; ova of various parasites, such as tapeworm, hook-worm, round worms, etc. During the past two years we have found the hook-worm once.

The routine in a blood examination is an estimate of the haemoglobin; counting the number of red and white cells per cubic millimeter; a differential count of the white cells; the color, shape, size, and the presence or absence of parasites in the red cells are noted. In this way diseases with a characteristic blood picture are diagnosed, such as the various forms of anaemias—pernicious, chlorosis, secondary—leukaemias and malaria fever. Some diseases of inflammatory origin, as appendicitis and pneumonia, show an increase in the number of white cells per cubic millimeter, which may be a great help in arriving at a diagnosis; others, of which typhoid fever is an example, show the reverse condition—a diminution in the number of white cells.

Another important examination of blood is the sera diagnosis of syphilis, which is known as Wassermann's reaction. The average for these is about fifty each month.

Cultures of blood are made in various diseases, as septicaemia. These cultures are frequently of great importance, as it is often possible to make a diagnosis of typhoid fever days in advance of the appearance of the Widal reaction.

Cultures are also made from all cases in which pus is found at operation, to ascertain the infecting organism.

Another interesting as well as valuable procedure is the examination of sections of all growths removed at the hospital, to ascertain whether they are malignant (cancer) or non-malignant tumors, or whether they belong to the class known as infectious granulomata. Often in doubtful cases this is done while the surgeon is operating. The surgeon excises a piece of the suspicious tissue, which is immediately frozen by means of carbon dioxid gas, and then very thin sections are cut. These are stained, mounted and examined with the microscope. Frequently it is possible to say in a short time (a few minutes) whether the tumor is cancer or not.

It is hoped that the next few years will bring forth additions to our equipment, further improve our methods, and widen the scope of the laboratory.

New Committee

THE Trustees have authorized the appointment of certain additional committees to assist in carrying on the work of the hospital. One committee is to have general supervision of the social service work, to raise the funds needed by that department, and to appoint the workers, subject to confirmation by the Board. A second is to have special oversight of the Harrington Hospital. It is charged with the maintenance of the free maternity service, and is to endeavor to build up the private room service. This committee is also to have general supervision of the welfare of all the patients in the Harrington, co-operating with the various agencies created by the social service committee. Though the ground at the Harrington is already covered, in a measure, by the social service workers, the needs of that hospital are special and diverse. The older children there are in themselves a group which a committee could well make its first care.

The chairmen of these committees are to be Trustees, and monthly reports are to be made to the Board.

The Supply Room

The surgical supplies and dressings for both hospitals are made by the probationary class of the Training School. These pupil nurses receive in the supply room their first lessons in responsibility, as they are in turn placed in charge (under supervision) and held responsible for the making of the supplies and dressings, the care of the room, the economy of material, and the maintenance of a supply sufficient for all regular requisitions and for emergencies. The dressings are sent from the supply room to the operating room for sterilization, and are then ready to be distributed as the requisitions may demand. Neatness and economy in handling materials are taught from the beginning, and are emphasized through the three years of training.

Gifts

Since the last issue of the BULLETIN, the hospital has received the endowment of a bed in the Harrington Hospital, for a year, from Mr. Franklin D. Locke, one thousand dollars from Mr. Spencer Kellogg, to endow the furnishing of a room, and three thousand dollars on the Stockwell bequest. The bequest from Mr. J. N. Adam has also been announced. These are matters of public congratulation. For until the resources of an institution reach a certain amplitude, it is limited to routine palliative work; whatever strengthens it beyond that point enables it to offer a different quality of service to its community. What a concentration of gifts at a strategic point can accomplish is shown by the maternity service; what returns an instrument of precision can yield let the Pardee Laboratory testify.

An especially valued gift was announced at the last meeting of the Board of Trustees—the endowment of a bed by Mrs. Charles W. Pardee in memory of her husband.

A TABLE giving the cost per week per patient in thirty hospitals, recently compiled, bears substantial testimony to the good management of the Buffalo General Hospital. These thirty institutions are of the same general class, but widely distributed geographically. Two are in Canada, the others scattered through thirteen states. The per capita cost at the Buffalo General Hospital is next to the lowest on the list.

Maternity Service.

NEVER has an effort more abundantly justified itself, or have gifts yielded a greater proportionate return than those which established the free maternity service at the Harrington Hospital. It was predicted that this year the service would double, but the increase has been approximately two hundred per cent. Each nurse now attends from twenty to thirty cases, and those in attendance, instead of being "on call" for the twenty-four hours, are now obliged to take the regular day and night shifts. A graduate nurse of experience is always in charge. In consequence of this increased service, nurses are graduating well equipped for obstetric work, and much readier to devote themselves to it than has heretofore been the case. Several young physicians are utilizing the opportunity offered by the Harrington to specialize in obstetrics. Here are substantial results in one department. On the patients' side, two instances may be cited—the first, a woman who had had two children die at birth, but whose third confinement, at the Harrington, was successful; the second, a woman who had lost six children at birth; when, at the Harrington, she was shown her seventh, a living and vigorous child, she could not believe that it was hers. In view of what specialized skill, plus the equipment of a modern hospital, can achieve, it is not surprising that the private maternity service should steadily increase.

The nurses' work with the cases on the free beds is largely educational. These patients are taught the value of baths, general cleanliness and fresh air, and during convalescence they assist in making bandages, folding linen and other such light activities of the ward. Those women who have no homes or means of support are not discharged until they have been provided for, and often the families from whom they are temporarily separated call for the good offices of the social workers. One patient, while under an anaesthetic, carried on an imaginary conversation with her husband. She told him that she would be glad to go to the hospital, where she would be warm and cared for, but how could she leave the other two babies in a cold house, with only one meal a day? It is needless to say that they were promptly cared for.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

Subscriptions may commence at any time. \$2.00 per year in advance.

VOL. LXVII.

APRIL, 1912

No. 9

Sanitary Science is mainly applied decency.

Announcements

It has become necessary to reduce the reserve file of back numbers still further. Anyone wishing old copies containing his own article, or any special report, obituary, etc., should apply immediately, stating exact date if possible, otherwise, approximate date. Libraries wishing complete files for binding should also apply promptly. We need a few copies of June 1911.

The Buffalo Water Supply.

DR. FELL'S article is all the more interesting and welcome because of his vigorous criticism of the editorial in the January issue. We realized at the time of writing, the danger incurred in venturing into deep water by one lacking expert engineering skill and, as stated, our remarks were purely tentative. We were also misled by a detail map which gave an erroneous idea of points of the compass. With these qualifications, however, we are disposed to adhere to the opinions expressed. The controversial points are:

1. The possibility of contamination of the new intake (a) by draft of infection from Buffalo Creek by outgoing vessels; (b) by excrement from vessels in either direction.
2. The practicability of placing the intake above the main commercial channel or vice versa.
3. The feasibility of obtaining reasonably clear water by protective breakwaters.

1. (a) Last year, according to the customs officials, there were more than 3,000 out-bound vessels, not counting tugs, excursion boats, small craft, etc. This was a light year. The commerce on the lake is usually limited to eight months, sometimes less, while the great majority of the passenger business falls in about 100 days from Decoration Day to Labor Day. During the summer months, it is probably an underestimate that two large vessels pass the intake, out-bound, every hour on the average. Often there will be a procession of out-bound vessels. It is a trifle over a mile from the mouth of the creek, about 3,500 feet from the present outer breakwater to the intake. It is not unreasonable to suppose that, by adhesion of infectious matter and possibly by the production of currents, this stream of traffic constitutes an appreciable source of danger.

1. (b) The Crystal Beach boats, last summer carried over a million passengers for round trips. The passenger line of longest distance and least frequency of trips carries about 33,000 passengers a season, one way or the other. For the other lines, excursion and to fairly distant points, no statistics are available. The crews corresponding to the approximately 7,000 entries and exits exclusive of excursion steamers must, at the lowest average estimate, amount to 100,000 individual passages. In the aggregate, about 2,500,000 persons are carried past the intake every season and, on account of the ordinary hours of the main passenger lines, the effects of haste and worry in catching boats and the anticipation of car rides, etc. after leaving them, it is obvious that the discharge of excrement for the period immediately after leaving and before arriving at the dock, is disproportionate to the entire time of passage. It seems reasonable to assume that the excrement of 2,500,000 persons, even for a short space of time, is an element of danger to those drinking the water.

2. While acknowledging that, under existing conditions, it is more convenient and natural for boats to pass above the intake, we can see nothing impracticable, remarkable or peculiar either in an original plan or subsequent alteration aiming to place the intake "up-stream" from a possible source of contamination.

The soundings southerly to the intake are from 22 to 25, occasionally 29 or 30 feet, those northerly (down stream) 17, 18, etc. It would obviously be very costly to move the intake but this scarcely seems necessary.

3. So far as our observation goes, roily water moves comparatively slowly into clear water and does not pass beyond dams, break waters, etc., unless these are quite pervious and turned

more or less across the current. As already implied, our suggestion of a breakwater at right angles to the present one, was due to a deceptive detail map. Such a breakwater would probably fulfill the purpose but it would have to be unreasonably long. We are inclined to believe that about a kilometer of breakwater in an arc or angle above the intake, allowing free passage of water both to the west and the east, would be more economic and more efficient. Allowing for the dredging of about 5 to 7 feet of silt, the depth of the pool thus formed would be about 10 meters, from mean lake level to bed rock. If the intake is in line with the lower ends of the curved or angular breakwater, the amount of water will be somewhere from one million to sixteen hundred thousand cubic meters (liquid tons) according to the curve or angle employed. Buffalo uses a little over a cubic meter of water per capita per diem, this being a very high figure and one which probably will not be maintained as the population increases. At present, three or four days' water supply could thus be partially impounded. It is obvious that the breakwater should constitute a filter, so as to allow a slow current toward the intake. On the one hand a breakwater so loosely constructed as merely to break the force of the waves, would not prevent the entrance of roily water; on the other hand a practically water-tight wall would merely favor the eddying back of the currents from the extremities of the breakwater. The cost of such a breakwater, at the rate paid for the present one, would be about \$310,000.

In conclusion, we want to make one important qualification: that, since the closure of the Bird Island Inlet, Buffalo has usually had very good water and that while we believe every precaution should be taken, Buffalo has already a water supply far superior to most cities!

Scope and Policy.

We had something to say on this subject in the September 1911 issue, at the formal beginning of the present editorial management. Not much remains to be said except on a few points in regard to which it is well to have a perfect understanding. It is obvious that the BUFFALO MEDICAL JOURNAL cannot exist solely as a municipal organ. On the other hand, certain rather arbitrary and let us hope not immovable prejudices render it impracticable, at least for the present, to expect a general circulation such as might be achieved from New York, Boston and a few other points. Hence, a reasonable compromise is to consider this journal as a local medium, but for western New York and adjacent states, and not for one city or even county.

In all departments of the JOURNAL, we are endeavoring to carry out this policy as equably as possible. If, on the one hand, any of our Buffalo friends feel that more space should be devoted to purely local matters, we would ask them to consider, first, that it is impossible to carry on a creditable journal with a support thus restricted in numbers; secondly, that many things which it is theoretically desirable to record, do not make interesting reading except to a comparatively few persons; thirdly, that in any case, it is necessary to remember the very large number of organizations and interests in our general territory, all of which should have an equable representation. If on the other hand, our subscribers in other cities and towns feel that too much attention is paid to Buffalo, we ask them to remember that Buffalo, has a greater medical population than any other sectional unit in our territory; also the very practical point that we are dependent in the original department largely upon voluntary contributions and, in the editorial and news departments largely upon the length of our tether which, for a man engaged in medical practice, is not very long. So, if any one, anywhere feels that his own section is being slighted, let him give us the material to correct the omission.

Secondly, with regard not to geographic but literary and scientific scope, it is obvious that, without increasing the size of the journal considerably, the editor must exercise the selective activity of secretory cells. With the exception of the very valuable historic series of the late Lt. Col. Potter, or at least until that series shall have been completed, early in the next volume, it has been decided that the original department must be strictly limited to practical, technical articles. This is no mere personal opinion but the general view of those whom it has been possible to consult. We, therefore, ask that no one be offended if congratulatory, historic and other addresses or articles dealing with purely ethical matters, are not considered available.

Conversely, it seems best that the editor should keep out of the original department and publish his own practical medical articles in other journals. Even regarding matters of policy and polity, it has been and will be our endeavor to secure collaborators and, otherwise, to avoid purely personal views so far as possible, at any rate to the extent of leaving an opportunity for everyone, in every department of the JOURNAL from cover to cover, to express himself as he pleases, provided that ordinary accepted rules of debate and of ethics are followed.

Just a few words about our standing offer to publish *full* transactions of any professional organization in our territory at cost. We are, as stated, very glad to publish brief news notes

of anything of interest in our territory. A few critics have expressed the opinion that we ought to publish transactions of a few societies free, as a matter of professional interest. Remembering that there are about 35 county societies, about ten large municipal or analogous regional societies, at least a hundred hospital and restricted organizations, in western New York, the impossibility of this plan becomes evident. It is obvious that there is no graft in charging printers' rates for pages added to the journal. In fact, if any considerable number of organizations accepted the offer, the incidental expenses of binding, postage, etc., would become so great that the offer would have to be withdrawn. But, for the present, it is open to any society that wishes to provide thus for preserving its records. Let it be understood that space thus taken will not be subtracted from the present number of pages of the JOURNAL but that extra pages will be added to compensate.

If anyone feels aggrieved that the minutes or reports or records of his particular institution are not considered available, let him ask himself if the same general kind of material would interest him if it referred to a society, or other organization of an entirely different nature and in a different city or town.

Fire Proof Schools

THE recent destruction of the Masten Park High School (Buffalo) by fire leads us to ask the development of a sentiment that, hereafter, every school building beyond small one story structures, should be of fire-proof construction. The value of the lives of children and teachers needs no argument. In fact the risk to life in buildings occupied only during the day time, not crowded with highly inflammable material, and with well disciplined occupants, is comparatively small—as instanced in the present case, in which all escaped in spite of the rapidity of the fire.

But the school should be not merely a place for lessons. Gradually there should be accumulated in it, works of art, scientific collections, something more than the ordinary library and laboratory equipment. A valuable conchologic collection was lost in the present fire; only procrastination in placing it, saved another valuable collection.

More than this, a fire proof building is the nearest approach to a clean building. The schools should be fire proof, not only on account of the danger of fire but of infection, not only on account of the immediate dangers of both but as an object lesson, constantly impressed on every pupil, leading to the demand in after life for the same precautionary construction of other buildings.

Finally, in the long run, fire proof buildings are cheaper for the tax-paying public, not only for obvious reasons which will be impressed on the citizens of Buffalo in the next year or two, but because of the indirect economy in fire fighting apparatus.

Corporation as a Doctor.

Proposed Law by Loomis is Very Quickly Knocked Out. Not at all Liked. All Senators Hasten to Disown Any Participation. Was Buffalo Measure. Concern Said to be Even Now a Going Business in This City. From *The Express* Bureau.

Albany, March 22.—A few days ago *The Express* noted the introduction by Senator Loomis of a bill perpetually incorporating the J. H. Dye Medical Company and conferring upon the corporation powers to practice medicine and surgery, to make medicines, to advertise remedies, to hold property, etc.

Today the bill was favorably reported by the judiciary committee and was immediately attacked by Hinman and Brackett and also by Wagner, the majority leader. The chairman of the judiciary committee washed his hands of the bill. The introducer attempted a defense, but the bill was sent to the committee of the whole which buries it.

Hinman could not understand how the bill had been advanced by unanimous consent upon its introduction. He said it was repugnant to him to think of the legislature incorporating a group of men, none of whom were physicians, to go into the doctoring business even though they hired licensed physicians.

Turning toward Loomis he said: "I do not know a single Tammany senator who would have risked his reputation in introducing a bill of this character."

It was stated in the argument that the would-be incorporators of the Dye company were a lawyer and a couple of clerks in his office.

Senator Bayne, chairman of judiciary, appeared nettled that the bill had been reported and he explained that the measure had reached the floor by a poll of the committee and not after proper consideration. "This sometimes happens," said he, "for some apparently good reason or because of the popularity of the introducer."

"I hope the senator does not mean to say that this bill was reported because of the popularity of the introducer," asked Big Tim Sullivan.

"I was not talking of any special bill," suavely responded Bayne, "but of conditions in general."

In the lower house the bill had equal success in making its silent way to a certain stage, having a place on the third reading calendar. Mr. MacGregor had it laid aside today.

The above is reproduced entire from the *Buffalo Express* of March 23, 1912. We need add nothing to the subject proper but we want to emphasize two things: 1. The medical profession should realize that, to a very large degree, it has the support and co-operation of the daily press and also of legislators. It is not only untrue but damaging to our future influence for good, to complain as some pessimists do, that we are handicapped by the indifference or open opposition of these great factors.

2. No better illustration could be found of the fact that different minds, especially under different training and habits, regard the same thing from very different view points. The impropriety of licensing a corporation to carry on the work of an individual, and work for which the individual has to show personal attainment and ability, would seem to be obvious to any trained legal mind—not to mention the well known attitude of the medical profession toward institutions of this sort. Yet the bill was introduced not by a mere politician but by a trained lawyer, of high standing; not by a Tammany senator, as in Senator Hinman's scathing comparison, but by one regarded as a reformer; not by an "ignorant foreigner"—who, by the way, seems to be rather a bogey than anything else—but by a man of culture and education whose claim to the term American is second only to the Indian's. In short, we have a bill that, according to the habits of thought of the medical profession, seems perfectly abominable, and yet introduced by a man who, in his private and professional life, is esteemed as an upright, honest, intelligent Christian gentleman. This incident will help us to realize how much allowance must be made for personal opinion and habit of thought, in securing the reforms that seem so urgent and so immediately necessary to us, and how patient we must be in our endeavors to make others think as we do.

OUR CONTEMPORARIES

THE *Homeopathic Recorder* of January 1912, in its leading article, comments on Sir Henry Butlin's admission to the Royal College of Surgeons that the present probability is in favor of an intrinsic origin of cancer and asks why we should not hold the same view regarding poliomyelitis, tuberculosis, etc. We

may reply that the reason is about the same which leads juries to indict certain men, bring in definite verdicts against others, and acquit still others. The tubercle bacillus has been tried and found guilty. Only the most unexpected discovery of fresh evidence can secure a reopening of the case. Poliomyelitis is in about the same state as a sudden death, with everything pointing toward murder and against suicide, with certain suspicions aroused but with no evidence sufficient to convict any individual. As to cancer, a number of arrests have been made, but in each case an alibi has apparently been proved, and many authorities are getting around to the opinion that it is a sort of suicide and not due to an extrinsic cause. The case is not clear as yet and we have no opinion to offer. But why should a disciple of Hahnemann who taught in the plainest way, even to the point of exciting ridicule, that diseases were due to an extrinsic, living cause, imply a hostility to the scientific working out of this theory?

The *Garden Magazine*, in its reading matter and advertisements, contains much matter of interest in regard to light farming, horticulture, poultry raising, care of animals, etc. It is a valuable adjunct in the cases of convalescence, mild invalidism, neurasthenia, overwork, incipient tuberculosis, etc., in which these occupations are of genuine therapeutic value either to prevent introspection, to afford exercise and out door life, or to add the means of earning a livelihood.

THE *Milwaukee Medical Journal* has suspended publication, on account of the illness of the Editor, Dr. W. H. Neilson.

PERSONAL

READERS are requested to send items for this section.

DR. LAWRENCE HENDEE of Buffalo, returned from Atlantic City, March 7.

DR. CHARLES A. BRADSHAW of Syracuse spent several days in Buffalo last month.

DR. EDWARD W. ROOS of Buffalo has returned from Europe and will locate in Corning.

DR. EVA G. FOWLER of Buffalo has been appointed resident physician at the State Training School for Girls at Hudson.

DR. EDWARD H. HUME, physician in charge of the Yale Hospital at Changsha, China, gave an illustrated lecture on the Significance of the Chinese Revolution, at the University Club of Buffalo, March 2, 1912.

DR. BRADFORD A. RICHARDS of Rochester, has removed his office from 6 Gibbs Street to 64 Clinton Ave. S. having become associated with Dr. John O. Roe.

DR. JESSE FLEET SAMMIS is removing from Rochester to New York city.

DR. S. CASE JONES, Rochester, has removed his office to 116 Barrington St.

DR. JOHN M. SWAN spoke before the Rochester Academy of Science upon the biology of the malarial parasites.

DR. FREDERICK W. ZIMMER of Rochester is on a trip to Panama.

DR. LEGRAND ALLEN WALKER, Rochester, N. Y., has returned to his home after an operation for appendicitis.

DR. J. W. KENNEDY of Philadelphia, gave a paper before the Rochester Pathological Society, March 21, on "Drainage of the Suppurative Lesions of the Abdomen."

DR. JOHN R. WILLIAMS and Dr. Joseph Roby discussed problems of milk and bovine tuberculosis before the Monroe County Medical Society on March 19.

DR. HENRY H. COVELL of Rochester, has left for a trip to New Orleans and other Southern points.

THE Rochester Chamber of Commerce has appointed the following Public Health Committee: Dr. Edward W. Mulligan, Chairman, Dr. J. R. Culkin, Dr. C. R. Barber, Dr. D. B. Jewett, Dr. L. L. Button and Dr. R. R. Fitch.

DR. E. R. LINKLATER of Buffalo, is seriously sick with scarlet fever.

DR. O. S. MCKEE of Buffalo, has returned from Atlantic City.

IN noting the removal of Dr. John M. Swan from the Glen Springs to take up private practice in Rochester, his street number was given incorrectly. It should be 457 Park Ave.

DR. BURT C. JOHNSON of Buffalo has returned from a fortnight's southern trip.

DR. MILTON P. MESSINGER of Oakfield, has recently purchased an apartment house.

DR. FRED S. HOFFMANN of Buffalo is improving some property in the vicinity of his residence.

DR. MARY T. GREENE of Castile has returned from Bermuda.

DR. HELEN DEWITT JUSTIN of Castile is spending several weeks in New York.

DR. SARAH L. CUSHING of Lockport, a well known philanthropist was nearly asphyxiated by escaping gas, March 23. In spite of her 96 years, she is expected to recover.

DR. GREENFEL, the Labrador physician and missionary will address the Twentieth Century Club of Buffalo, April 6.

OBITUARY

SAMUEL HOBART DORR, Ph. G., Ph. M., a graduate of the Department of Pharmacy of the University of Buffalo, and for many years Professor of Microscopy, died March 18, 1912, after a lingering illness, terminating in pneumonia. He was born in Scottsville, July 8, 1850.

Mr. Dorr was known to many of the medical profession as a thoroughly competent pharmacist, to all who met him, as a genial though dignified gentleman. His modesty was such that only those associated with him as colleague or student, or those of similar tastes, knew of his researches in pharmacognosy and botany.

DR. DAVID LITTLE, one of the oldest and most skillful of Rochester's physicians, died at his home, 162 Plymouth avenue, shortly before 3 p. m. March 1, 1912, aged 78 years. About two weeks before he was taken ill, and although he received all possible attention, his constitution, worn by years of hard and active service in the care of the sick and the advancement of his profession, was unable to throw off this illness.

David Little was born in Cherry Valley; Otsego county, February 9, 1834, the son of David and Julia Seelye Little. There he was educated at the academy, and from there he went to Union college, where he was a member of Kappa Alpha fraternity and Phi Beta Kappa society, being graduated in the class of 1855.

After graduating from Union college, Dr. Little attended the College of Physicians and Surgeons in New York city, being graduated in the class of 1857. He then served as interne at Bellevue hospital.

In 1859 he began the practice of medicine in Rochester, but at the outbreak of the Civil war he enlisted and was attached to the medical corps of the 13th infantry, New York volunteers, the regiment which saw so much fighting and was in the heat of many of the greatest battles of the war. For two years he served in this regiment, when he received an honorable discharge, and returned to Rochester once more to practice his chosen profession.

In 1863 he was married to Catherine A. Livingston, whom, with one daughter, Alice, and three sons, Dr. Seelye W., Beekman C. and Frank Little, he leaves.

Besides actively practicing medicine, Dr. Little spent considerable of his time in research and experiments, gaining for himself the distinction of being one of the closest students of the science, and one of the best and most skillful surgeons in the city.

After his return to Rochester he became surgeon and consulting surgeon on the staff of the City (now General Hospital, in which capacity he served nearly 50 years. His death comes as a distinct loss to the medical profession, and will be deeply felt; but not to the members of the profession alone, for his was a disposition of kindness for fellow man, and wherever he ministered to the wants of the sick he made a friend. Always looking for the comfort of others, his work was so kind that he might be called one of the truly great men of this generation.

Dr. Little was a member of Rochester Pathological Society, Hospital Medical Society, Monroe County Medical Society, Medical Society of the State of New York, and George H. Thomas Post, 4, Grand Army of the Republic (*Rochester Post Express*).

DR. EDWIN R. MAXSON of Syracuse, a graduate of the University of Syracuse, 1886, died January 25, 1912.

DR. ARTHUR W. THOMAS of Rochester, a graduate of Syracuse, 1895, died February 29, 1912, aged 39. He was an interne at the Rochester City (now General) Hospital in 1895-'96.

In October 1896, Dr. Thomas was married to Dr. Cornelia White, of Syracuse, who was a classmate in the medical school. He leaves his wife; one son, Robert W. Thomas; his father and mother, Mr. and Mrs. Edgar Thomas, of Fabius, N. Y., and two brothers, C. E. Thomas, of Skaneateles and W. H. Thomas, of Syracuse.

DR. HENRY LAPP of Clarence, a graduate of University of Buffalo, 1865, died March 1, 1912, aged 76. He was born at Clarence, educated at the Williamsville Academy, and spent 48 years in the active practice of his profession. He was a member of the county and state societies, of the Gross Medical Club, was formerly a Censor of the Medical Department of the University of Buffalo, President of the Medical Society of the County of Erie, and was widely and affectionately known in his profession. Beside a widow, two brothers and a son in business life, he is survived by a son, Dr. Henry C. Lapp, who is practicing medicine at Clarence.

DR. JAMES H. HEWITT, a classmate of Dr. Lapp's died at his home in Lebanon, Ill., February 25, 1912, aged 71. He was Surgeon in the 147th Volunteers of Pennsylvania, during the Civil War and later practiced medicine in Summerfield, Ill., for more than 40 years.

DR. LUDWIG SCHROETER of Buffalo died last month in Capri, Italy, having left home a few weeks previously in the hope of regaining his health. He was born in Poland in 1860, graduated in medicine at Berne, Switzerland in 1889 and shortly after came to Buffalo. He was especially well known as an obstetrician, being consultant at St. Mary's Maternity Hospital, the Buffalo General and the German Hospital. He was a member of various medical societies. It is perhaps significant of Dr. Schroeter's attachment for the land of his adoption, that his remains will be brought to Buffalo. It is no betrayal of professional confidence to speak of the quiet heroism displayed by Dr. Schroeter during the insidious progress of his last illness, especially in the face of circumstances particularly trying to a patient educated in medical matters,—the negative results of investigation along lines at first suggesting themselves to the patient: the gradual development of other symptoms, the ordeal of an operation at a distance from home, the search for health in the face of grave doubts as to its possibility.

DR. ANNIE M. TREMAINE of Fredonia, died at Willard, N. Y., March 25, 1912.

DR. LAWRENCE TROWBRIDGE of New York, son of the late Dr. Trowbridge of Palmyra died in New York of ptomaine poisoning, March 21, 1912.

DR. EVERETT W. FISH of Pittsford, died suddenly, March 24, 1912, aged 66. He was a graduate of the University of Michigan but had not practiced medicine for many years, having engaged mainly in newspaper work.

REAR ADMIRAL JAMES RUFUS TRYON, U.S.N., retired, but in charge of the Sailors' Snug Harbor on Staten Island, died March 21, 1912. Immediately after graduation, he entered the Navy as Assistant Surgeon, during the Civil War, and as indicated by his rank, rose to be Surgeon General.

BOOKS AND AUTHORS

Honan's Handbook to Medical Europe. Dr. James Henry Honan, Chicago. Published by P. Blakiston's Son & Co., Philadelphia. \$1.50.

This little book begins by giving advice to those visiting Europe for the first time. Letters to foreign professors except those from warm personal friends are considered useless. Each country is then considered separately, its advantages and medical laws discussed. The countries are further subdivided into cities, under which head is given a list of the hospitals and staff together with the courses given by each and fees charged. Careful perusal of this book must prove of inestimable value to those contemplating a European trip.

Nervous and Mental Diseases. By Archibald Church, M. D., Professor of Nervous and Mental Diseases and Medical Jurisprudence in Northwestern University Medical School, Chicago; and **Fredrick Peterson, M.D.**, Professor of Psychiatry, Columbia University. Seventh edition, revised. Octavo volume of 932 pages, with 338 illustrations. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$5.00 net; half morocco, \$6.50 net.

It is with considerable personal gratification that many of our readers will peruse this book. Dr. Peterson was a graduate of the University of Buffalo in 1879 and began the practice of medicine in Buffalo. Progressiveness has characterized his work from the time that he scandalized some of the older physicians in a local hospital by measuring intestines at necropsy in centimeters instead of inches. It is obviously impossible to do justice to such a work in a brief review. Perhaps the best index to its thoroughness, conciseness in spite of its large size, and comprehensiveness is the fact that only 29 pages are given to hysteria. When we consider how easy it is to pad a work on

this subject, by interminable descriptions and discussions of hysteria, we comprehend that this work is almost encyclopaedic.

Blair's Pocket Therapeutics. By Thomas S. Blair, Harrisburg. Published by The Medical Council Co., Philadelphia, 1911. 370 pages, \$1.00.

This is a pocket condensation both of medical practice and therapeutics, containing an astonishing amount of information of great utility, especially for the recent graduate liable to encounter problems at a distance from counsel or a library. It is easy to sneer at such compends as superficial but they save lives.

Studies of the Niagara Frontier, Frank H. Severance, Vol. 15 of the Buffalo Historical Society Proceedings, 1911. 437 pages, 3 maps, cloth.

Seventeen eighteenth century and a few earlier descriptions of the Niagara Frontier, and a charming chapter devoted to "History that isn't so" are perhaps the most readable but the main value of the work rests with its exhaustive study of the history and literature dealing with the region. The editor has long been the acknowledged authority in this field and it is fortunate that his years of study are to be permanently preserved.

Diseases of the Skin and the Eruptive Fevers. By Jay Frank Schamberg, M.D., Professor of Dermatology and Infectious Eruptive Diseases in the Philadelphia Polyclinic and College for Graduates in Medicine. Second edition, revised. Octavo of 573 pages, 235 illustrations. Philadelphia and London: W. B. Saunders Company, 1911. Cloth, \$3.00 net.

The frequent use of tables, as well as the abundance of illustrations, facilitates the acquisition of information from this book. The final chapter on the eruptions occurring occasionally but not typically in the course of various fevers, not classified as eruptive, in serum reactions, etc., is especially valuable because it has rendered available a great mass of scattered observations.

Health and Medical Inspection of School Children. Walter S. Cornell, M.D., Philadelphia. Published by the F. A. Davis Co., Philadelphia, 1912. 614 pages, 200 illustrations, \$3.00.

This is a timely book, presenting in concise form the varied problems which many cities are just beginning to meet. In the absence of established precedent and long experience, Dr. Cornell has established a model which will probably be copied by other authors soon. His book should be in the hands of every school principal and superintendent, every school inspector or aspirant for such a position. More than this, the description of physical defects actually encountered in children, the demonstration of

hereditary taints, the careful study of feeding, and many other details render the book valuable to the practitioner. We wish, too, that it might be purchased at public expense and placed in the hands of state and municipal legislators.

Practical Gynecology, E. E. Montgomery, M.D., LL.D., Philadelphia; P. Blakiston's Son & Co., Philadelphia, 1912. 4th edition, 854 pages, 589 illustrations, \$6.00.

Nearly twenty-five years ago, as a post-graduate student, we had the benefit of Dr. Montgomery's clinics at Blockley Hospital (locally known as the A'ms House) and probably saw one or two of the identical anomalous cases described in his book. It has been a pleasure to watch his development. His book has been brought nearer perfection with each edition and is a masterly treatise. To pick a minor flaw, we are a little disappointed that so scholarly a gentleman should retain without apology, such hybrid words as vaginitis, vulvitis, etc.

Progressive Medicine, Vol. 14, No. 1, March, 1912. Edited by Hobart A. Hare and Leighton F. Appleman. Published by Lea & Febiger, Philadelphia. This volume contains a resume of Surgery, Infectious Diseases, Pediatrics, Laryngology, Otology, under competent department editors. 376 pages. Quarterly, \$3.00 per annum.

This is a most valuable digest of current literature, intermediate between the magazine and the text book. It is, we think, too valuable for a paper cover.

Principles and Practice of Physical Diagnosis. John C. Da Costa, Jr., M.D., Philadelphia, W. B. Saunders Co., 1911. 557 pages, 225 original illustrations.

This is the second revised edition and is a most estimable book following the customary arrangement but with many allusions to pathology, illustrated from specimens, with brief references to X-rays and other more modern methods. The illustrations of methods of inspection, percussion, etc., follow to a certain degree the excellent innovation of Butler. Fig. 24—The thorax of incipient phthisis, represents a full breasted, broad waisted young woman with just about the ideal amount of subcutaneous fat. We don't question the diagnosis for we have occasionally found marked physical signs in chests apparently normal, but the inspection signs, if any, are not conspicuous. In mentioning auscultatory percussion, the author gets into deep water. This very valuable method might better be omitted altogether than discussed so briefly and with so many omissions. Tuning-fork auscultation is ascribed to Warder, without date. We have always supposed that we originated this method. At any rate the essay presented to the Medical Society of the State of New

York in 1894 and published with illustrations of tuning-fork, electric buzzer, stethoscopes, etc., in the 1895 Transactions and in the *Philadelphia Medical and Surgical Reporter* April 27 and June 1, 1895, was not questioned so far as priority was concerned.

A. L. B.

Transactions of the Thirty-third Annual Meeting of the American Laryngological Association. Held at Philadelphia, Pa., in May 1911. Published by the association.

These Transactions are published for the members of the Association, but a few copies are available for outside sale. The volume contains the complete records of the meeting, including all papers read, the business transacted and a list of the members of the Association. Although the papers were written by specialists for specialists, a number of them are of great general interest, and the general practitioner would be benefited by their perusal. Those papers are: The President's address with its suggestions upon the relationship between diseases of the nose and throat and general conditions; the paper upon Epiglottidectomy, by Dr. L. B. Lockhard of Denver, in which he tells of the relief of pain after removal of the epiglottis in tuberculosis of that organ; that on Syphilis of the Larynx, by Dr. G. C. Stout, of Philadelphia, with its valuable hints on treatment, both local and general; the paper on the Relation of Enlarged Tonsils to Endocarditis, by Dr. A. C. Getchell, of Worcester, Mass., with its thought as to the origin of rheumatism; and that with the title, Are the Tonsils a Menace or a Protection? by Dr. H. L. Swain, of New Haven, Conn.

The remaining papers, as well as those quoted, are of the high order of merit usual in the papers presented before this Association. They are scholarly and of very deep scientific interest. Anyone choosing to read this book will not waste his time.

The Taylor Pocket Case Record. By J. J. Taylor, M. D. Published by the Medical Council Co., Philadelphia, 1911. \$1.50.

This is not a visiting list but a series of blank forms bound together, with alphabetic index. Two pages, facing each other, are allowed for a case, with spaces for listing in the usual form, noting principal symptoms, findings, diagnosis and treatment, with record of subsequent attendance. While obviously not adapted to keeping elaborate records, it is a good working memorandum book for the general practitioner and it can be used in the office and in a round of calls. One minor fault should be and undoubtedly will be remedied—the paper is so thin that one is liable to be confused by seeing at one time the writing on both sides of one leaf and on one side of the next leaf.

Digest of Comments on the Pharmacopoeia of the U. S. A., and on the National Formulary, for the Calendar Year 1909, by Murray Galt Motter and Martin I. Wilbert, No. 79 of the Hygienic Laboratory. Government Printing Office. 735 pages.

The large number of articles abstracted requires great brevity and, in many instances, one has mere opinions to deal with. These criticisms should certainly be carefully studied by the committees in charge of the Pharmacopoeia, National Formulary, etc. There are also many references to strictly analytic methods, as of the examinations of blood, urine, faeces, etc., too brief to be of value except as a bibliographic list.

Vol. VI, Transactions of The American Association of Genito-Urinary Surgeons, maintains the same standard of excellence as its predecessors.

Ruggels, Diseases of the Verumontanum, states that nitrate of silver applications to the diseased organ must consist of strong solutions or even the solid pencil to be effectual.

Swinburne, describes a new Complement Fixation Test for gonorrhoea similar to the Wassermann reaction. The objection to this test is the uncertainty when positive as to whether the patient is still infectious or whether antibodies persist after recovery.

Binney, advises that a mercury manometer be connected to a catheter while the urine is flowing out as a test for bladder atony.

Cabot, presents a simple scale for the phenosulphonaphthalein test or renal function. Ten test tubes are filled with solutions of the drug varying in strength from 5 to 50 per cent. alkalized and sealed with paraffin. The urine to be tested is diluted to 1000 c.c. some is then poured into a test tube of similar size and compared with the scale. By this method the solution may be estimated within 2 per cent. He considers this test to be simpler in technic and more accurate in its results than any other.

MISCELLANY

Causes of Death by Age Periods in the Registration Bureau of the U. S.

From Bulletin 109, U. S. Census, for 1910

The total number of deaths in 1910 for the 53,843,896 population was 805,412. Of these, 154,373 were infants under 1 year of age, 33,080 were 1 year old, 14,727 were 2 years old, 8,808 were 3 years old, 6,331 were 4 years old, 217,319 were under 5 years, 17,943 were 5 to 9 years old, 235,262 were under 10 years old, 31,508 were 10 to 19 years old, 62,957 were 20 to 29 years old, 68,957 were 30 to 39 years old, 72,935 were 40 to 49 years old, 81,540 were 50 to 59 years old, 96,651 were 60 to 69 years

old, 96,000 were 70 to 79 years old, 51,401 were 80 to 89 years old, and 7,974 were 90 years and over.

THE IMPORTANT CAUSES OF DEATH.

Among the deaths numbering 805,412, from all causes at all ages in 1910, tuberculosis (all forms) was the most important cause, being responsible for 10.7 per cent. of the total; organic diseases of the heart followed with 9.5 per cent.; diarrhoea and enteritis, 7.8 per cent.; pneumonia (lobar and undefined 6.7 per cent.; acute nephritis, Bright's disease, 6.6 per cent.; accident (not including injuries at birth) 5.6 per cent.; cancer and other malignant tumors (all forms) 5.1 per cent.; cerebral hemorrhage, apoplexy, 4.9 per cent.; bronchopneumonia, 3.1 per cent.; premature birth, 2.5 per cent.; congenital debility, 1.9 per cent.; old age, 1.7 per cent.; typhoid fever, 1.6 per cent., bronchitis (acute and chronic 1.6 per cent.; Diphtheria and croup, 1.4 per cent.; diseases of the arteries, atherma, aneurysm, etc., 1.4 per cent.; suicide, 1.1 per cent.; and 1.0 per cent. each for influenza, diabetes, paralysis without specified cause, other diseases of the stomach (cancer excepted), the puerperal state, and malformations.

CAUSES BY AGE-PERIODS.

For infants under 1 and 1 and 2 years of age, diarrhoea and enteritis was the most important cause of death, the percentage being 29.0, 28.9, and 12.9, respectively. Diphtheria and croup caused the largest proportion of deaths of children 3 and 4 years of age, the percentage being 16.4 and 18.2 respectively. For the entire group of children under 5 years of age, the leading cause was diarrhoea and enteritis, 26.3 and for children from 5 to 9, it was diphtheria and croup 16.4. Diarrhoea and enteritis caused 24.5 per cent. of all deaths among children under 10 years of age.

TUBERCULOSIS GREATEST FROM 10 TO 50 YEARS OF AGE.

Tuberculosis caused by far the largest proportion of deaths at each 10-year age period from 10 to 50 years of age. At 10 to 19 years, it formed 24.5 per cent. of the total deaths; at 20 to 29 years, 35.0; at 30 to 39 years, 28.5; and at 40 to 49 years, 18.3. At 50 to 59, 60 to 69, 70 to 79, 80 to 89, 90 and over, the percentages were 10.2, 5.1, 2.4, 0.9 and 0.4, respectively. It formed 1.6 per cent. of all deaths among infants under 1 year of age and steadily increased to 5.3 at 1 year, 6.1 at 2 years, 6.9 at 3 years, 7.2 at 4 years, but forming only 2.8 for under 5 years, although going as high as 7.9 per cent. in the age-period from 5 to 9 years, and 3.2 for under 10 years.

HEART DISEASES RULE FROM 50 YEARS UPWARD.

Organic diseases of the heart constituted the most important cause of death at each age period between 50 and 90 years of age and also at the period 90 years and over, barring "old age."

The percentage of deaths from heart disease at the age-periods, 50 to 59, 60 to 69, 70 to 79, 80 to 89, 90 and over, was 13.4, 18.2, 19.8, 17.0, and 11.2 respectively. It caused 0.6 per cent. of all deaths among children under 1 year of age, 0.4 at 1 year, 0.7 at 2 years, 1.0 at 3 years, 1.6 at 4 years, 0.6 of all under 5 years, 4.0 of all from 5 to 9 years and 0.9 of all under 10 years of age.

BRIGHT'S DISEASE AND CANCER.

Acute Nephritis, Bright's disease, caused from 3.4 to 6.3 per cent. of the deaths at the 10 year age periods from 10 to 39 years of age, but it increased to 9.5 per cent. at 40 to 49 years, advancing again to 11.7 per cent. at 50 to 59 years, still increasing to 12.1 per cent. at 60 to 69 years, then falling to 11.1 per cent. at 70 to 79 years, decreasing again to 8.5 per cent. at 80 to 89 years, and finally becoming 5.4 per cent. at 90 years and over. It caused 0.8 per cent. of the deaths at 1 year, 1.3 at 2, 2.0 at 3, 2.2 at 4, 0.7 of all deaths of children under 5 years of age, 2.6 of all deaths at the 5 to 9 years age-period, and 0.8 per cent. of the deaths of all children under 10 years of age.

Cancer is not charged with any percentages in the age periods up to 19 years of age, but it formed 1.1 per cent. at 20 to 29 years, 3.8 per cent. at 30 to 39 years, 9.0 per cent. at 40 to 49 years, 12.1 per cent. at 50 to 59 years, 11.1 per cent. at 60 to 69 years, 7.8 per cent. at 70 to 79 years, 4.5 per cent. at 80 to 89 years, and 2.2 per cent. at 90 years and over.

TYPHOID AND APOPLEXY.

Typhoid fever caused 8.0 per cent. of the deaths at the age period 10 to 19 years but decreased to 6.0 per cent. at 20 to 29 years, to 3.2 per cent. at 30 to 39 years, to 1.8 per cent. at 40 to 49 years, to 1.1 per cent. at 50 to 59 years, there being none for the remaining age-periods. It formed 0.4 per cent. of all deaths at 1 year of age, 0.9 at 2, 1.6 at 3, 2.6 at 4, and 3.8 per cent. at the age-period 5 to 9 years of age.

Cerebral hemorrhage, or apoplexy, began its course with 0.7 per cent. of all the deaths at the 20 to 29 years age-period, then constantly increasing to 1.7 at 30 to 39 years, 4.0 at 40 to 49 years, 7.5 at 50 to 59 years, 10.7 at 60 to 69 years, 12.1 at 70 to 79 years, but falling to 10.8 at 80 to 89 years, and 7.5 at 90 years and over.

ACCIDENTS, ETC.

Accident (not including injuries at birth) claimed 0.9 per cent. of all deaths among infants under 1 year, 3.4 at 1 year, 7.3 at 2 years, 9.0 at 3 years, 10.3 at 4 years, 2.3 of all in the under 5 years age period, 12.0 of all in the 5 to 9 years, 3.1 of all deaths of children under 10 years, 13.1 at 10 to 19 years, 12.9 at 20 to 29 years, 10.5 at 30 to 39 years, 8.2 at 40 to 49 years, 5.3 at 50 to 59 years, 3.4 at 60 to 69 years, 2.9 at 70 to 79 years, 3.5 at 80 to 89 years, and 5.1 at 90 years and over.

Suicide starts with 1.1 per cent. of all deaths at the 10 to 19 years age-period, increasing to 2.8 at 20 to 29 years, then decreasing to 2.6 at 30 to 39 years, 2.3 at 40 to 49 years, 1.8 at 50 to 59 years, stopping with 1.0 per cent. of all deaths at the age period of 60 to 69 years.

Homicide begins with 1.7 per cent. of all deaths at the age period of 20 to 29 years, 1.2 at 30 to 39 years, and 0.6 at 40 to 49 years.

PNEUMONIA AND APPENDICITIS.

Pneumonia (lobar and undefined) claims 5.5 per cent. of all deaths of infants under 1 year of age, 10.1 at 1 year, 10.0 at 2 years, 8.1 at 3 years, 7.5 at 4 years, 6.6 of all deaths in the age period of under 5 years, 6.3 at 5 to 9 years, 6.6 of all under 10 years, 5.7 at 10 to 19 years, 5.6 at 20 to 29 years, 7.1 at 30 to 39 years, 7.8 at 40 to 49 years, 7.6 at 50 to 59 years, 7.1 at 60 to 69 years, 6.5 at 70 to 79 years, 5.7 at 80 to 89 years, and 5.1 at 90 years and over.

Appendicitis begins with 1.0 per cent. of all deaths of children at 4 years of age, 3.2 of all at 5 to 9 years, 4.7 at 10 to 19 years, 2.0 at 20 to 29 years, 1.4 at 30 to 39 years, and ends with 1.0 at 40 to 49 years.

CLEAN MONEY.—The Baltimore Clearing House is agitating for a reform in this particular. In Washington, the stranger is detected by his dirty bills. Out west, the tenderfoot betrays himself by objecting to a load of silver dollars. Bacteria are said to die upon metallic surfaces but the portability of bills renders them almost a necessity. A girl "worth her weight in gold" is only moderately well-to-do, (say \$40,000) and the old tales of carrying off a fortune in gold fall flat in these days of the little dollar. We have previously suggested that aluminum, which is light and which can be both etched and perforated as a metal and printed like paper, would be an ideal base for fiat money. Cards of aluminum of the size into which a bill is usually folded, would be portable as paper money and would be amenable to protection against raising the denomination and somewhat fireproof.

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ORIGINAL COMMUNICATIONS

Retroperitoneal Tumors and Intraligamentary Pregnancy.

By JOHN M. LEE, M.D.
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SO far as I know there is no very satisfactory treatment for the exceptionally large growths of these regions laid down in the text-books of our profession. For this reason surgeons are accustomed to draw upon their own experience and judgment for the management of these unfortunate cases. My own methods in this line of work may prove of value to some, therefore I will give them without further excuse or comment. There are three sites for these growths that have been of especial interest to me: First, from the cervix between the peritoneum and mucous membrane of Douglas' pouch. Second, from the uterus under the folds of the broad ligament and downward rupture of the tube between the folds of the same membrane in extrauterine pregnancy. Third, tumors of the kidneys.

I have often been surprised at the extreme displacement of the pelvic peritoneum from pregnancies and tumors which sometimes develop beneath it. Twice within two weeks in February, 1900, I operated upon enormous broad ligament cysts both of which sprang from under the right broad ligament, and hence in that respect resembled intraligamentary or extraperitoneal pregnancy. The larger tumor was estimated to weigh eighty pounds. The smaller growth also filled the abdomen. The uterus was pushed forward and to the left, the folds of both broad ligaments were stretched out and obliterated, the peritoneum was gradually lifted from the floor of the pelvis, from the rectum and from the lateral and posterior surfaces of the uterus and bladder off the sides and brim of the pelvis, the back, sides and front surfaces of the abdominal walls, and you will be surprised when I tell you that the cecum and appendix were lifted clear up under the ensiform cartilage where they were found and observed by all present. The only places where the peritoneum was ruptured were underneath the median line of the abdomen over the tumor and again just to the left

of the cecum. I have enucleated many tumors from the pelvic floor and have often been surprised at the extent to which the peritoneum may be lifted, but in these cases it was so great that it scarcely seems possible, and no one who has not seen similar conditions can appreciate the extreme height to which the pelvic peritoneum may be carried by benign neoplasms.

In intra-ligamentary pregnancy at the time of spurious labor the distention is the same though less in degree, and one may see how readily the fetus may be reached by incision at the right or left of the median line and the peritoneal cavity not be opened at all; in these cases of tubal rupture downward, between the folds of the broad ligament, the ovum may develop from its original site with part of it within the tube and the other half between the folds of the mesometrion, or it may be completely extruded between these membranes which is the more frequent occurrence. Whether the fetus is entirely between the folds of the broad ligament or not it may develop until about the fifth month when secondary rupture may occur. In fact this may result shortly after the primary rupture, or there may be several ruptures in quick succession or none at all between the time the tube first gives way and term. These secondary ruptures are exceedingly hazardous, and if the mother's life is not sacrificed by the hemorrhage or the fetus does not perish, the pregnancy goes on to term within its membranes either as ligamentoperitoneal or peritoneal gestation.

Again, in rare instances the secondary rupture occurs during the eighth month and the fetus develops in the peritoneal cavity for several weeks without an enveloping membrane.

So far as I have been able to search the literature there are only four cases of this character on record: The first by Mr. T. R. Jessop referred to by Tait in his work on abdominal Surgery, Page 494; the second by Prof. James C. Wood, the third by a surgeon in the West, whose name I cannot recall, and the fourth was operated on by me in January, 1898. All of these women recovered.

My case was Mrs. W. P. S. of Rochester. There had been a primary and secondary rupture though the symptoms were not marked. The first occurred about the tenth week and the second during the eighth month. The incision showed a fully developed fetus completely extruded from the sac and transversely placed across the epigastrium with its back downward. There was not a scrap of membrane about it anywhere. When the peritoneal cavity was opened, an enormous quantity of liquor amnii rushed out with flakes of *vernix caseosa*. The incision was extended above the umbilicus when the somewhat flattened buttocks with a scrotum came in plain view. The skin resembled in color the

liver and at first sight those who witnessed the operation thought these parts were really an hypertrophied liver and the child's scrotum which hung down between the folds of its buttocks so completely resembled the gall-bladder that the appearance of the above condition was complete. The tube was the site of the pregnancy for the first ten weeks, the broad ligament five or six months and the abdomen for eight months, about sixteen months in all. The placenta was spread over the broad ligament, tube, intestines and the omentum.

In all of these cases the placentae had their attachments at the site of the primary or secondary ruptures. They were widely spread over the tissues and the children all lay free in the abdomen surrounded with amniotic fluid without a bit of membrane.

If the tubal rupture is downward between the folds of the broad ligament, which on account of the anatomical relations is not so common, the pregnancy becomes intraligamentary or extra-peritoneal, and as the hemorrhage is not so great the immediate chances for the patient are correspondingly better. In this unusual site the development of the ovum as in other locations may be arrested at any stage, there may be several secondary ruptures or it may go to term.

The operation, therefore, in this variety of the disease must be varied to suit the requirements: If the pregnancy is advanced sufficiently to carry the peritoneum upward the incision should be made to the right or the left of the median line near the ilium so as to reach the gestation without opening into the peritoneal cavity, then shell out the membrane, pack the sac lightly with gauze and compel it to granulate up and cicatrize over. If not able to divide the tissues at the side of the *linea alba* outside of the peritoneum, make the incision in the median line or over the most prominent part of the enlargement, then place gauze pads or towels between the tumor and abdominal wall all around, open the peritoneum of the broad ligament down to the pregnancy and extract it in such a manner, if possible, as not to soil the margins of the wound. If the cavity is aseptic, it may be sewed up with buried sutures and the abdomen closed; but if large it should be cleansed out with an antiseptic solution, if required, and the sac stitched to the peritoneum of the lower part of the abdominal wound. This forms a deep, entirely extra-peritoneal cylindrical wound which may be packed lightly with gauze or drained with rubber tubes. These are both ideal methods for the treatment of infected pregnancies which result in pelvic abscesses.

When this intraligamentary pregnancy is far advanced, remove the fetus and tie the broad ligament if possible with strong

catgut near the horn of the uterus, then close to where the ovarian vessels cross the iliac artery to prevent excessive hemorrhage while removing the placenta; then stitch the sac to the abdominal wound, bodily remove the membranes and quickly pack the cavity level full with moist gauze. Now pile this material up two inches thick over the opening and the borders of the abdominal wound, over which place a guttapercha tissue protective, cotton and binder.

If secondary rupture has occurred and one of those exceedingly rare cases with no sac presents, and the placenta is attached to the tube and broad ligament as is usual, ligate the ovarian vessels as above, then remove the placenta and pack the bleeding surface over with gauze as in the handkerchief dressing, and firmly hold it down till the hemorrhage is arrested; then bring the end of the gauze out through the abdominal wound and apply the above dressing.

If the intraligamentary pregnancy is low down in the vagina, this canal may be freely incised, the cavity well cleaned out and good drainage secured.

A remarkable case of neoplastic growth from beneath the upper part of the posterior abdominal peritoneum was that of Mrs. Lizzie T. She was about thirty-five years of age and the mother of several children. A large growth filled the entire abdomen, yet it was apparent that it did not spring from the internal genitalia. An accurate diagnosis as to its nature and site was quite out of the question prior to operation. A competent surgeon of the city had made an exploration by abdominal section and concluded that removal of the growth at that time was inexpedient.

The tumor, which proved to be sarcoma, grew rapidly and finally the pressure became so great that life was unbearable. and, while she knew the danger from operation was great, she desired surgical treatment even if there was but small chance for success. Accordingly on August 18th, 1903, she entered the hospital and two days later abdominal nephrectomy was performed.

The incision had to be made from the ensiform cartilage to the pubis to make sufficient room to turn out the tumor. It grew from the right kidney as was believed to be the case prior to the operation and the vessels, especially of the pedicle were of enormous size. Care was taken to avoid important tissues. The peritoneum over the dome of the tumor was incised at a convenient point, the tumor was carefully removed by enucleation and the division of the vascular adhesions between clamp on the proximal and ligature on the distal side of the growth. The

pedicle with its great vessels was clamped close to the tumor and tied at two convenient places short distances from the clamp. The ureter was tied, the stump cauterized and the tumor removed.

A similar case was that of Katherine D. She entered the hospital July 15th, 1908. The tumor grew from beneath the peritoneum and completely filled the abdomen. The following day her operation was conducted in about the same manner as the foregoing case and her tumor was found on microscopic examination by a City pathologist to be also sarcoma and it grew from the right kidney.

The growths which emanated from the uterus and were classed as retroperitoneal were removed through semi-circular incisions of the peritoneum across their posterior surfaces. As the enucleation progressed it often became necessary to tie many very vascular adhesions. When the growths were finally removed all bleeding surfaces were secured and the immense wounds beneath the peritoneum closed by three or four rows of continuous catgut sutures, one upon the other. When the incised borders of the peritoneum were reached they were also brought together by a running catgut suture. During the placing of these stitches great care was taken not to wound the great aorta, the vena cava, or the intestines. Yet when necessary to bring organs in proper relations to one another or obliterate open spaces in which fluids might accumulate we did not hesitate to pass our sutures through the outer walls of intestines or even more important tissues.

In the removal of the kidneys with the exceedingly large growths the incisions through their peritoneal coverings were made in any direction that seemed suitable to avoid important organs and the wounds were closed in precisely the same way as was followed in the myomata.

The convalescences of all these cases were not unlike those of any ordinary abdominal operation except that they were required to remain in the hospital a few days longer. The first kidney case took up her work as usual after she returned home; several years later she gave birth to a fine healthy child, and a few months thereafter died. All of the other four remain well and follow their usual avocations.

Dysmenorrhoea.

By STEPHEN Y. HOWELL, A.M., M.D., M.R.C.S. England

FROM puberty to the menopause, from the beginning of functional activity in the generative organs of the human female to its close, the disorders incident to menstruation may manifest themselves.

Influenced by climate, social environment and heredity, as well as by individual and racial peculiarities, the burden of this mysterious and altogether unesthetic handicap of womankind is borne through a variable part of her life. While the classical and generally accepted average bounds are the fourteenth and forty-fifth years, precocious infants and old women of eighty or more have alike nonplussed the medical fraternity by the regular recurrence of this mensal flow.

As is evidenced by its terminology, the periodicity of the discharge corresponds generally with the lunar cycle of twenty-eight, though ranging from twenty-four to thirty-four, days.

Concerning the correlation of ovulation and menstruation the opinions of many learned students of human and comparative physiology have clashed in wordy polemics during past years. At present, however, the dominant view favors their mutual independence. While the escape of the mature ovum from the Graafian vesicle and the phenomena of menstruation are usually synchronous, they may be, and usually are, of independent occurrence.

In these days, when the biological importance of the ductless glands is being so rapidly established, any facts, germane to our subject, which throw light upon the ovarian functions are full of interest. Those mysterious chemical messengers which are concerned in the regulation of somatic activities, aptly termed "hormones," are becoming, through the labors of Starling and others, more and more familiar. The *secretin* which abounds in the duodenal mucous membrane and which regulates, through the medium of the blood, the secretion of the pancreatic juice and bile proves to be but one of a probable many. Chemical substances secreted by the thymus, thyroid, parathyroid, suprarenal and hypophysial glands must be included in this list of hormones. The roles played by carbonic acid in the regulation of respiration, by gastrin in gastric digestion and by the hormonal material secreted by the developing ovum *in utero*, which passes into the blood-stream and incites the mammary activity incident to pregnancy, include these in the same category. In the case of the ovary likewise, evidence points to the presence of such a chemical messenger, as the following facts would seem to prove: As a rule, ovulation in lower mammals is associated with a state known as "heat," "rut" or "oestrus," preceding which is a stage termed "prooestrus," in which phenomena corresponding to menstruation appear. If the ovaries of such mammals are completely extirpated, heat and its menstrual accompaniments fail to recur. Should ovarian extract, prepared from the ovaries of an

animal in the rutting state, be injected into the sterilized one however, the latter again becomes in heat.

The ovaries, tubes and uterus of a woman are congested and enlarged during the menstrual period. The mucous membrane becomes highly vascular. The walls of the congested arterioles and capillaries undergo degenerative changes which increase their porosity and lessen their resistance, thus favoring diapedesis and rupture. Blood is poured out into the interglandular connective-tissue and forces its way through the epithelial barriers into the *cavum uteri*, or accumulates in the deeper areolar spaces. Because of this mechanical violence and interference with its food-supply, the over-lying mucous membrane undergoes fatty degeneration and is thrown off in the form of granular and shreddy tissue-debris, to be regenerated during the later reparative stage.

The degree of congestion incident to menstruation varies just as in inflammation. In the case of a young girl who is nearing puberty, a periodical white mucous discharge attests the mild congestion of the uterine mucosa which leads only to the migration of leucocytes and to glandular stimulation; while, after maturity is reached, the more intense process is evidenced by the presence not merely of mucus and glandular secretions but of blood, together with the histological components of the destroyed tissues.

The symptoms which usually accompany menstruation are local and reflex in character. There is a feeling of fullness, weight and pressure in the lower abdomen and pelvis, due to the congestion and greater bulk of uterus and adnexa. The individual is subject to headache, frequently severe in character. She is inclined to be nervous, irritable and hypersensitive to her physical and mental impressions. The skin is prone to disorders of a congestive, pigmentary and eruptive character; while the breasts, thyroid, parotid and tonsils are apt to increase in size, influenced probably by ovarian hormones.

In the normal girl or woman, however, menstrual pain should be absent. In fact, many individuals, particularly during the period of adolescence, do not feel called upon to interrupt their usual rounds of duty and pleasure because of this functional disturbance, which, to them, is objectionable for reasons purely esthetic in character. Again, extensive disease of the genital organs, serious and even fatal in character, may be present and yet occasion no dysmenorrhoea.

As a rule, however, painful menstruation is due to pathological conditions, either local or general in character; though the casual factor or factors may not be demonstrable. During the

menstrual molimen a woman may undergo physical torture which necessitates recourse to powerful anodynes, even anesthetics; and yet a most painstaking examination discloses little or no pathological change to account for her suffering. In the great majority of cases, however, such conscientious diagnostic efforts are rewarded by the discovery of local or systemic conditions which afford the needed information. After definite abnormalities are easily made out; and, if these are curable, we can promise our patients the desired relief.

The pains which characterize dysmenorrhoea do not include the general *malaise*, with pelvic weight and fullness which, as we have already noted, are symptomatic of normal menstruation. They are rather described as dull, heavy, sharp, dragging, radiating or bearing-down; and their usual location is in the loins, or low down in the back or pelvis. Some women complain of their suffering during the whole period; in others the pains begin or end with the establishment of the flow. In my own experience, the time of maximum pain with reference to the appearance of the discharge is of great importance from a diagnostic point of view. Thus, in patients whose dysmenorrhoea is conterminous with the menstrual period, I am disposed to look for systemic, or widely diffused local, trouble. When the pains antedate the establishment of the flux, the ovaries or tubes, or both, are usually at fault; while the cause of the later suffering is generally to be looked for in the uterus and lower genital tract.

The pains of dysmenorrhoea, as in all other conditions, are due to stimulation of the sensory nerves, the afferent feeders, as it were, of the cerebro-spinal nerve-centers. Painful impulses are transmitted from the genital organs partly through the myelinic, or white, dendrons which reach the cord through the white rami communicantes, partly through the afferent fibres of the third and fourth sacral nerves, which join the pelvic, or inferior, offsets of the hypogastric plexus directly from the anterior primary divisions of these nerves as visceral branches, without the mediation of the gangliated cord of the sympathetic. Entering the cord through the ganglia and fibres of the posterior roots these impulses, as do those of heat and cold, ascend through the gray matter of the cord to the optic thalamus, whence they reach the sensory cerebral cortex through fibres of the corona radiata. Muscular and tactile sensations are transmitted to the cortex via the posterior columns of white matter.

Pathological confirmation of these facts is afforded by the diseases known as syringomyelia and locomotor ataxia. In the former, a disease of the gray matter about the central spinal canal, conscious perception of painful and thermal sensations is

lost, while tactile impulses reach the cortex. In the latter disease, which involves the afferent neurons and the posterior columns of Goll and Burdach, pain, heat and cold are felt while muscular and tactile sensations are no longer experienced.

The muscular coats of the ovaries, tubes, uterus and vagina, as far as the hymen, are made up of smooth muscle-fibres, the hymen representing the more or less intact partition between the vagina and the uro-genital sinus, which latter constitutes the floor of the pudendal cleft from the clitoris to the fossa navicularis. These involuntary fibres, as well as the peritoneum, blood-vessels and glands of the genital organs are under the control of the splanchnic or sympathetic nerves primarily, though linked to the central nervous system in the manner already described.

Under normal conditions afferent impulses from these organs do not raise to consciousness, even pain is often absent on injury. When the irritation is very great, however, pain is referred to areas of skin supplied by those somatic nerves whose visceral branches are thus affected. In this way the pains incident to dysmenorrhoea, affecting the back and loins, are accounted for. Viscera which are innervated purely by sympathetic nerve-fibres are insensitive, the presence of somatic nerve-branches being necessary for the reception of pain and other sensations. For this reason the anterior margin of the liver, the gall-bladder, stomach, intestine and mesentery may be cauterized or cut without subjective pain; while the parietal peritoneum is alive to painful impressions but not to touch. If we bear in mind the connecting links between the central and visceral nervous systems, the symptom-complex associated with dysmenorrhoea is easily explained. Thus, an infective process involving the pelvic visceral peritoneum may be attended with vomiting, abdominal rigidity, paresis and other reflex symptoms, as well as pain. The pressure of inflammatory exudates upon the sensory nerve-endings, and perhaps their chemical irritation, are largely responsible for the condition known as dysmenorrhoea.

The lesions associated etiologically with painful menstruation may be grouped into two classes: Local and General.

The local conditions commonly present are: (1) Inflammation, (2) Tumors, (3) Obstruction and (4) Malformation and defective development.

Among the general or systemic causes, acting alone or in conjunction with local lesions, are anaemia, chlorosis, gout, rheumatism, hysteria and neurasthenia (Dudley).

The key to the rational treatment of dysmenorrhoea is accuracy of diagnosis. Is the pain in a given case referable to a

local or general condition, or to both combined? This query having been correctly solved, the treatment, whether medical or surgical, conservative or radical, palliative or curative, will suggest itself; and upon the good judgment, as well as upon the medical and surgical ability of the attendant will depend a satisfactory outcome.

In view of the wide range of the subject, it is obviously impossible to give a detailed enumeration and description of the therapeutic measures to be adopted for the relief or cure of dysmenorrhoea in all its phases. We must rather content ourselves, in conclusion, with a few observations based upon the experiences of the past. In the first place, radical measures should be instituted only after careful deliberation and with guarded prognoses. Major operations are often indicated in cases of infective inflammations and tumors, involving any or all of the generative organs, and an associated dysmenorrhoea is thereby usually relieved. In some instances, however, the pain is referred to one or both ovaries. Combined palpation may disclose exquisite tenderness of these organs, and the urgency of the neurotic symptom may be so great as to lead to operative intervention. Exposed to view, however, these organs may be the seat of no demonstrable lesions; and, under such circumstances, their removal seldom affords the desired relief.

The great majority of patients who consult physicians for painful menstruation are the victims of uterine displacements and abnormal flexures, coupled, oftentimes, with metritis and endometritis of varying severity. In such cases, generally young unmarried, or childless women, the pain is chiefly referable to mechanical causes. Unnatural pressure upon the rectum and sacral nerves, or pressure and dragging upon the bladder, play their respective parts as algetic agencies.

Greater than these, however, is the mechanical interference with the blood-flow incident to such conditions. Uterine flexions may be, and are, responsible for the more or less complete occlusion of the uterine canal at the point of bending and a resultant obstructive dysmenorrhoea. The same conditions, however, interfere with the local patency of the vessels, particularly the veins, and initiate all the evils accompanying congestion of the passive type. The uterine tissues are more or less devitalized from lack of a normal food-supply, and atrophy accordingly. Or, the organ becomes congested, swollen and infiltrated with exudates. Connective-tissue hyperplasia may ensue; and, from the pressure and chemical irritation due to these conditions, the

sensory nerves bear their tales of woe to the cerebral cortex and urge the sufferer to seek the aid of her physician.

Fortunately, dysmenorrhoea which is occasioned by these most common conditions is easily cured or abated. For the displacements, tampons, properly selected and properly fitted pessaries and the Alexander operation or its internal modifications will prove effective in the great majority of cases. For the menstrual pains due to uterine flexures and their attendant changes in the endometrium simple instrumental dilatation and curettage, properly performed, usually afford great and lasting improvement, often a cure. Stem pessaries have been strongly advocated by many physicians of large experience in the treatment of these angulate canals, but the fear of evil consequences has tended to limit their use.

In extreme cases of flexion the cervix may be incised in a manner best suited to the individual condition, the object being to straighten and enlarge the cervical canal. Bilateral incision of the cervix, hollowing out the intermediate tissues and uniting the vaginal and inner cervical edges with interrupted or continuous catgut sutures is a very effective proceeding, usually accredited to Pozzi. Not only is the dysmenorrhoea thereby relieved but conception is facilitated, and the familiar curative effect of gestation and parturition may be utilized.

Medical relief, often of a very satisfactory character, may result from the use of remedies best adapted to any abnormal systemic conditions which may be present, coupled with the palliative use of phenalgin, antikamnia and other coal-tar derivatives, aspirin and codeia. Used singly or in suitable combinations, these drugs are well adapted to such cases as refuse to undergo the more or less trying ordeals incident to surgical procedures.

In prescribing for this class of sufferers, however, the dangers ever incident to the palliative treatment of pain should be borne in mind. Thoughtless approval of alcoholic aids and the exhibition of various insidious drugs, unaccompanied with suitable warning and advice, are highly reprehensible in the treatment of dysmenorrhoea, because of its recurrent nature. Bitter indeed must be the reflections of a physician who is forced to realize that an innocent woman has been added to the pitiful host of drunkards and drug-fiends through his instrumentality.

164 FRANKLIN STREET.

A Report of Cases Treated With Gonococcus Vaccine.

By J. G. W. KNOLL, M.D.

Buffalo, N. Y.

CASE No. 1. Woman age 27. Before coming under my observation had both tubes removed, but when she first consulted me there was a greenish yellow discharge from the uterus; microscopic examinaion showed gonococci, she was weak, anemic, and complained of pains all over the body. There was every evidence of a general systemic gonorrheal infection. I administered 40,000,000 Gonococcus Vaccine (P. D. & Co.) which produced a severe reaction with malaise and general increase of unfavorable symptoms so that she was confined to bed for four days. Seven days after the date of first injection, I gave 20,000,000 and this was also followed by a severe reaction, which kept her in bed three days. Seven days later I gave 10,000,000 with no reaction. No more vaccine was given, but the discharge and other symptoms all disappeared, and she has remained well to date.

Case No. 2. Man, age 31. History of gonorrhea five years ago, two years ago had an attack of gonorrheal rheumatism in hip, knees and wrist, which laid him up for three months. Before he had entirely recovered from the first attack there was recurrence of gonorrheal rheumatism in both knees and right hip; the greenish yellow urethral discharge showed gonococci. I gave 20,000,000 Gonococcus Vaccine (P. D. & Co.) no reaction. Five days later, gave 40,000,000; still no reaction. The discharge ceased, pain left right side in both hip and knee, and swelling disappeared. Joint on left side softened, and the pain lessened. Five days later, gave 100,000,000 Gonococcus Vaccine; still no reaction and all symptoms disappeared. Seven days later gave 200,000,000 Gonococcus Vaccine; patient had severe reaction, pain and soreness in all previously affected joints, but no discharge. Microscopic examination of urine showed no gonococci. Two weeks later gave 100,000,000 Gonococcus Vaccine, without any reaction. Patient was discharged cured. Have kept him under observation since, but he has shown no return of symptoms.

Case No. 3. Gonorrheal Orchitis, 48 hours standing. Gave one dose of 40,000,000 Gonococcus Vaccine (P. D. & Co.) and all symptoms disappeared in three days.

I have cured several cases of "morning drop" by administering three doses of 50,000,000 Gonococcus Vaccine each with a seven day interval between doses; it has never been necessary to give more.

482 WILLIAM STREET.

A New Departure in the Medical Expert Matter.

DR. S. W. LITTLE
Rochester, N. Y.

WE of the Monroe County Society, being convinced that attempts at the regulation of medical expert testimony have failed and must fail for some time to come for various reasons, political, business and temperamental, have decided to attack the problem in a new way. We believe that the united medical profession can force a reform in this matter without legal, financial or any other aid. We believe that our State Society could do it but won't—yet. We think that in Monroe County the County Society can do it and we are going to try. Our hope is that we shall succeed and if we do, our confident expectation is that other county societies will follow suit and eventually the State Society. If New York State, then other states.—An ambitious program, but miracles are happening all the time.

Here is our scheme which was formally adopted by the society at its recent regular meeting: At the next regular meeting the censors will recommend to the society for adoption a list of experts in Insanity. (We start with Insanity alone—wisely, our joking critics say).

The Society will then vote on these names and any one receiving a three-fourths vote of members present will be vouched for by the Society as an expert in Insanity for one year.

Anyone desiring to go on the list may at any time present his name and credentials to the censors exactly as for admission to membership in the Society. It is the plan to be very liberal in the matter of certification, the object being of course, to prevent grossly incompetent men from posing as experts.

The list of names properly certified will then be sent with an explanatory note to every lawyer and judge practicing in this County. That is all.

No one will be obliged to employ these certified experts but it is reasonable to suppose that they will be preferred whenever possible, because an expert vouched for by the profession would have more weight than one qualified by his own say-so alone.

The possible results of such a scheme are interesting to speculate upon but in another year we shall have more than speculation to report. If good seems to follow, our plan is to present in like manner lists of experts in other lines of medicine and surgery.

There is at least one desirable feature that is sure to result. The Monroe County Medical Society will be in a dignified position as regards expert medical testimony, a position not held

at present by any medical society or by any medical man in this country. We say in effect to court, lawyers and public: "Here is a list of medical men whom we, their associates, consider experts in Insanity. You may use them or not as you see fit, but if you do not use them you cannot blame the medical profession for any more medico-legal scandals."

S. W. LITTLE,

President, Medical Society of the Co. of Monroe.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

November 1, 1863. This has been one of the finest days imaginable, just the day for marching, and we are expecting orders.

November 3. It was certainly anticipated that we should move before this, and I hear that a movement is on the tapis which is likely to occur very soon. The weather could not be more delightful, Indian Summer has set in, the trees are losing their foliage amidst their everchanging hues, and everything looks autumn-like, much as it does North a month earlier. I expect to return to my regiment in a few days if we do not move, as I have nothing to do here.

November 5. The weather continues pleasant, but orders do not come for us to move yet. Yesterday, however, the sick were all sent to Washington—a pretty sure indication that we shall march soon.

Tomorrow night (Friday, November 6, we intend giving a party at this camp, providing, of course, we do not move before. Our headquarter tents are trimmed with evergreens, a band of music is engaged, and all preparations are completed for a jolly time. Last night (the 4th) the Second Delaware Volunteers gave a party, where a large number of the officers met and had a very enjoyable time.

November 9. We broke camp at Warrentown, or near there, day before yesterday, the 7th, early in the morning, and marched all day in a cloud of dust. Yesterday morning early we crossed the Rappahannock at Kelley's Ford, without much opposition.

The 6th Corps crossed at Rappahannock Station, taking 1,100 prisoners, and four cannons, in a redoubt at the R. R. Bridge. We are not anticipating the enemy will make much of a stand this side of the Rapidan. Our party came off on Friday night as planned, though it broke up at midnight on account of the orders to move next morning early. We had about fifty guests, good music, a collation, Milk Punch, et ceteras; and everybody was happy, or seemed to be, at least.

November 12. This is Thursday, and for two or three days past it has been cold with a little snow; but this morning it is warmer and consequently more pleasant. We have been constantly changing position for the past three or four days, but nothing has been accomplished beyond getting the several corps well into line.

November 14. Saturday. There is a feeling afloat that we shall move on Monday next, but it is difficult to say on what it is based.

November 16. Monday. A terrific rain storm passed over us last night, but this morning it is pleasant. Firing has been heard at intervals during the day, along our front and that of the right wing, owing to an attack of the rebel cavalry, in which they are reported to have driven ours back upon the Sixth Corps. We are ordered to hold ourselves in readiness to move at a moment's notice, but I don't anticipate a general engagement until this army moves forward again, which is likely to be sometime during the week. I shall not return to my regiment as I thought probable a few days ago, as there is something to do here as long as we are actively campaigning.

November 17. We are near Brandy Station. The weather is very fine now, and we shall probably move soon. In regard to the cavalry fight of Sunday last (the 15th), it is said by some that we got the worst of the bargain, and lost 500 men; I rather think we were beaten, but cannot learn the particulars.

November 19. We are still here, hourly expecting orders. Some English officers were entertained yesterday with a review and drill of the Second Corps, and expressed themselves as much pleased with the American soldiery.

November 21. A drizzling rain has kept up since daylight, and, as a matter of course, the mud is pretty deep tonight.

November 23. We are ordered to move tomorrow at daylight.

November 25. We did not move yesterday as ordered. Our tents were struck, wagons packed, and the head of the ambulance train pulled out for the start—all in the midst of a heavy rain—when the orders came countermanding the movement.

Every man cheered lustily, and the woods for miles rang with the echoes of applause. The mud is knee deep, or thereabouts, which is the explanation of the change of orders; but I presume the movement is only temporarily in abeyance. The rain is still pattering on my tent, but as soon as the roads are sufficiently dry we may expect to be off. Tomorrow will be Thanksgiving Day, and our dinner will consist of pork and beans, bread without butter, and no special viand.

MINE RUN.

On Thanksgiving Day, Thursday, November 26, 1863, we broke camp at daylight and marched to Germanna Ford on the Rapidan, a distance of seven miles, which we had reached before noon. The enemy made no resistance to our crossing there, but, owing to the steep banks on either side of the river, it was late at night before the entire corps, including the artillery, had crossed, some of the latter not getting over until the next morning. We camped at nine o'clock at night about two miles beyond the Rapidan, on the road leading from Culpepper C. H. to Fredericksburg, and about five miles from Robertson's Tavern. By seven o'clock on the morning of the 27th, the corps was well under way, the Second Division leading, the Third Division next, and the First Division bringing up the rear. By ten o'clock the skirmishers had encountered the enemy, and a rattling fire of musketry was kept up for two hours, the rebels falling back to Robertson's Tavern on the Orange and Fredericksburg Pike. Skirmishing was kept up until nightfall, with occasional discharges of artillery, and the casualties of the Corps had reached, probably, fifty men. During the night of the 27th, Friday, the enemy fell back to Mine Run, where he was strongly fortified.

We followed at early daylight, and the 28th was spent very much as the day previous, viz.: in skirmishing, and feeling the position. On the morning of the 29th the Second Corps, with one Division of the Sixth, all under command of General Warren, moved by a circuitous route around to the enemy's right flank, with the design of turning his position. We arrived there about five P. M., too late to accomplish much that night, and the next morning (30th) it was discovered that their fortifications there were even stronger than those we had left in the center. We spent two days in skirmishing and feeling, and at nine o'clock P. M., December 1, turned our backs upon the "Rebs" and their fortified position, and commenced retracing our steps toward our old camps. We marched all night in the clear, cold air, suffering therefrom intensely, and by daylight, Tuesday, December 2.

the whole army was safely on the north side of the Rapidan again.

This is a brief sketch of what we actually did, and I shall not attempt to say what we might have done. It is sufficient to remark that the Army feels entirely satisfied with General Meade's decision not to attack such formidable works as he found, no matter what the people of the North may say about it. We had no communication with Washington for the eight days we were away.

On Friday, December 4, I was sent to Washington with a R. R. train load of wounded from the Second Corps, reaching the city at midnight, remaining till the 8th.

Wednesday, December 9. I left Washington yesterday morning, but did not reach camp until this forenoon. I arrived at Brandy Station at a late hour last night, and was kindly offered quarters by Dr. J. Bernard Brinton, the Army Medical Purveyor. I enjoyed the brief visit to the capital, for it is a relief to get away from the Army even for a few days; especially after such a severe campaign as we recently had over the Rapidan. The weather was extremely cold. We could have no fires that were at all comfortable, and the Army suffered severely. I don't think we will make another aggressive campaign this winter, but we shall probably move to a more favorable spot for winter quarters, where timber and water can be had more plentifully; here there is very little of either.

December 11. The weather is very cold and we haven't even a comfortable place to write a letter, but by tomorrow night we expect to be comfortably domiciled in a log house we are building. The weather reminds me much of the season North; being about the same temperature. An order was issued last night restoring the ten days leave of absence to officers. One surgeon can be absent from each Brigade at a time, and this may give me an opportunity to visit home in January.

December 16. Rumors were rife yesterday that we should move today, but the day has nearly passed and no orders have yet been received indicative of a movement. Many officers are of the opinion we will stay here during the winter, but I have not yet settled into that belief.

December 18. It has rained almost uninterruptedly for thirty-six hours, and the roads, as a consequence, are simply horrible; in fact, one cannot step outside of quarters without going ankle-deep in the mud. I have not been outside of camp for five days, and don't attempt to go anywhere except on urgent business. This would be considered lazy in the North, but it is not so here.

where one becomes so completely enervated after a campaign of deprivation and suffering.

December 20. Today is a cold, bright winter day, which is an agreeable change after the rain of the past week.

December 23. Yesterday I visited the Sixth Corps and the 49th, where I saw Colonel Bidwell, Dr. Hall, Major Ellis, and other officers of my acquaintance. Major Ellis went away last night for ten days, leaving in his usual good spirits. Today is a pleasant, cold day, much like a December day in the North. It is my present purpose to apply for a leave about January 10, prox., which will fetch me home about the 15th or 18th.

December 26. Christmas Day passed off yesterday in a very quiet manner with us. We dined on roast turkey, and had porter for drink. Dr. B. Gesner, Medical Inspector of the Second Corps, was our only guest. He has been recently married, and proposes fetching his wife down to the Army next week. If I should have a hospital, as I now expect, perhaps I will not ask for leave, but have my wife come and visit me instead.

December 28. We are still at the same place, but I may leave the Ambulance Corps in a few days if I take charge of the Division Hospital again. It has been raining very hard for twenty-four hours.

December 29. Division Hospitals have been ordered re-established, and I have been appointed to the charge of the First Division Hospital. I have drawn ten new tents today, and shall commence putting them up tomorrow; in the course of another week everything will be in running order. Several ladies have already arrived in camp, and more are expected soon. Dr. Gesner goes north tomorrow to fetch his wife, and every train is bringing the women into camp. General Meade has issued an order permitting the wives, sisters or mothers of officers to visit the Army for twenty days, and the order is being complied with most heartily.

Serum Therapy¹

By DR. W. S. GARLOCK
Little Falls, N. Y.

THE subject treated in this paper is not a new one and the past year's work comprises but an extension of former work but it may not be inopportune to try to take a general glimpse of serum therapy and to try to see where it stands in the treatment of disease and the larger field of biology. The experimental work on which it rests has given most marvelous

1. Read for St. Luke's Clinical Society.

revelations of the complexity and interdependence of the various functions and cells of the body.

A correct idea of this subject depends largely upon a knowledge of the physiology of the component cells of the body.

We may premise by saying that an animal is a republic of cells each with its own life and metabolism. Let us for a moment consider one of the simplest animal cells that lives an independent life.

The *amoeba* is nothing, but a single celled animal and in that one cell we find all the functions of cellular life—elementary and undifferentiated. It grows, eats, digests, assimilates, exerts, moves, reproduces its kind and has enough feeling or sensation to know what particles it comes in contact with are suitable for food. In a large way this is a type of animal cell to which even the differentiated cells of our own bodies are no exceptions as we can simply by a little reflection perceive that these are all functions necessary to cell life. The ovum is a single cell that after fertilization undergoes segmentation at first simply but in a short time the various cells begin to take on peculiarities due to differentiation but this is largely a development of one of the primordial functions of the simple cell. For instance, the motor functions of the simple cell become more and more prominent until it finally develops into a muscular cell but still retains in diminishing degree all of its primitive functions that are necessary to its cell life. So with all the other peculiar cells, some becoming glandular cells, some nerve cells and so on. There must be a harmonious development of all these cells or the various organs finally formed will not be right. All these cells must be nourished by the blood and all of them must get rid of their excretions. Some of the excretions of the cells are simply to be removed from the body republic of cells while other excretions are of use to other cells either as food or as stimulants to their function. These latter are the internal secretions and hormones as they have been called.

In the differentiation of the cells in the body development the various kinds of cells have become differently susceptible to influences of environment and attack from organized and unorganized substances in the physiological atmosphere in which they live. They also need different food elements on which to live and from which they get their functional energy. Thus one class of cells will take from the lymph and blood what they need and after using it in their metabolism pour their excretions which in some cases are secretions back into the lymph and blood. These excretions are removed in one way or another either directly or

through the metabolism of other cells with excretory functions. If these excretions are attained unduly in the system they are disease producing. The secretion of these cells alluded to that are prepared for the use of other cells either act as food for other cells or act as stimulants or regulators of their action. Thus an excess of the secretions of the thyroid gland act on the heart and nerves to cause Graves' disease while their deficiency causes cretinism. The adrenals islands of Langerhans, thymus hypophysis, etc., produce such active secretions. The relationship of the different species of the animal kingdom is so close that such cell products of one animal in some cases can be used to modify the cellular activities in man and other animals and on these foundations is being built up organo-therapy.

In the body republic or the individual man certain cells are differentiated into reproductive cells as ova and spermatozoa. These cells carry the hereditary principles capable of development into new animal republics with all the developmental potentialities needed for this kind of reproduction. Most of the separate differentiated cells of the body retain their reproduction capacity so far as it is needed to reproduce their own kind of cells but in some cases this seems to be lost at least ordinarily and certain tissues are largely made up of mother cells producing daughter cells that have a function but do not reproduce their kind but their functions are terminal. Thus the blood cells do not ordinarily reproduce but are daughter cells of the mother cells in the blood-cell-making organs and tissues. These cells do their work and die. Their production seems to be almost unlimited. In a large measure they are the defensive and reparative cells that defend the animal against infections of various kinds. Thus the white blood cells are in a way the scavengers of the system and eat up the foreign organisms that get into the body republic. They are the policemen and executioners of the animal republic. This function while probably largely exhibited by the white blood cells is not confined to them but remains more or less in the various tissue cells.

These defensive cells are able in some cases in one way or another to protect the body against toxic or disease producing substances or organisms accidentally getting into the body republic and they do this in various ways either by phagocytosis or the formation of various antibodies which remain in the cells and body fluids for a longer or shorter time and while there more or less perfectly protect the cell republic against the foreign element in the body politic.

The productive action and use of the antibodies so formed and the various modifications of the body cells and fluids result-

ing from the activities of these foreign elements in the body open the broad field for the study and science of immunity and the cure of infectious diseases.

The body is protected against disease by various lines of defenses. First, by sanitation and health laws. Second, by the skin and mucous membranes, including the digestive juices; third, by the blood and body fluids and by the cells first of the blood and later by the tissue cells. The blood being the general medium by which foreign substances are distributed in the body, its white cells constitute the skirmish line of the defensive forces.

A study of the invading forces becomes interesting at this point and we may premise by saying that these forces may be organic or inorganic, living or dead and a complete consideration of them would include drugs as well as all toxins but we shall in following remarks confine ourselves to toxins as that is the particular part of the therapeutic frontier we wish to consider.

Let us first consider *toxins*. These are products of all life and are either free toxins which correspond to excretions of their producing cells and are cast off to be removed by the physiologic atmosphere in which they live and exert their malign influence immediately or are *endotoxins* which are probably like the internal secretions of our own organs and do not enter the fluids of the host until the cells producing them are dead and disintegrated.

The toxins may get into the body either by the cells that produce them getting into the body and producing the toxins after their entrance or they may be produced outside of the body and get into the body of the host in various ways. Some of the cells introduced quickly succumb to the body defenses in one way or another like the influenza germs or else they may live on indefinitely like the germs of tuberculosis, syphilis, etc.

Some germs seem to leave a lasting impression on the body so that one infection protects against subsequent ones like small-pox while others seem to rather predispose the host to subsequent attacks like influenza. It goes without saying that the invading hosts vary in their toxicity and destructibility and it is entirely probable that the products of some foreign cells are beneficial because they supply the body with useful substances or they have been a part of human environment for so many generations that we have become immune to them and are adapted to their influence. In this way the various species of animals are immune to or but slightly affected by these germs and toxins some to one and some to another and so on and the discovery of what makes one species immune to a toxin and

the possibility of using that protective something or antibody obtained from an immune animal to protect or cure one that is not immune is a great object in experimental work and the work going on in these lines is very promising not only in the protection against infection but in the cure of disease. Passive immunization is arrived at in this work.

Protection against and cure of diseases caused by the entrance of germs may be due to the leucocytes eating the intruders as in phagocytosis and in some cases the efficiency of this process may be increased by opsonin treatment which rather seems to affect the germs to make them subject to phagocytosis than the leucocytes to increase their appetites and ability to destroy the germs. As the germs become more virulent in nature, they become less subject to phagocytosis. Opsonins seem specific in their action on germs and only act on the species from which they are produced. Another and perhaps more important field of work is that of active immunization where the animal is treated to cause the production of the antibodies in the cells and fluids of the body treated. This is illustrated in vaccination where living germs are introduced or inoculated or when dead germs are introduced to get the effects of the endotoxins or where simply toxins are introduced to get their effect on the body cells.

This is the aim of vaccine and serum therapy.

In some cases the nature of the germs is modified before they are used.

We may now ask the question: How are the various antibodies formed and how do they act? But anything like a complete statement of the knowledge we can get from a review of the literature on this subject would be tiresome and take too much time.

The toxins seem to be organized molecules somewhat of the nature of ferments and a peculiarity of these bodies is that they seem to be composed of two groups or parts of different natures one is the toxiphore group which is the toxic or business partner and the other the haptophore group which has the ability to unite with the cell attached. A familiar illustration of this dual function is the ordinary postage stamp and this seems to be applicable to all the toxins endotoxins and antigens that are so much spoken of in literature.

A postage stamp without any mucilage would not be able to unite and a letter would not be affected by it. A letter without any part that would adhere to mucilage would be immune for instance, an oiled paper. Now, suppose the stamp and letter alive and the stamp becomes adherent. The letter to have the stamp adhere must have a receptor or part where the stamp can adhere or unite chemically. Now suppose the stamp causes the

letter to throw off as by a kind of disquamation pieces of paper that are fitted to adhere to the stamp and these pieces of paper float freely. New stamps would adhere to them and not to the letter and if a great many free pieces of paper or receptors are thrown off, so many of the stamps would adhere to them that the letters would not be hurt.

These free receptors are the antibodies that protect the letter and simple antitoxins are of this nature. By inoculation of horses with increasing doses of diphtheria toxins the horses' blood becomes so loaded with free receptors or antitoxin that when injected into a child with diphtheria toxin in its blood, the toxin unites with the antitoxin and is neutralized.

Now, suppose the pieces of paper thrown off from our attacked letter are not simple pieces of paper but are like postage stamps with an active and a binding group. The binding group unites with the binding side of the toxin and the active part affects it in one way or another. The agglutinins and precipitins are of this order.

Amboceptors are like pieces of paper with two binding groups and serve to unite cells, toxins and complement. The complement unites with the complementophile group of the amboceptor and the other group of the amboceptor unites with the cells and in this way through the intermediary amboceptor the complement causes lysis as hemolysis, bacteriolysis, etc. The complements are normally present in the blood or are the products of infection.

If there is an excess of amboceptors in the blood, some of them may unite with the complements in the blood and other amboceptors may unite with the cells so that the complement is fixed because amboceptor cannot unite with amboceptor and so the complements cannot get at the cells. In these cases lysis is not produced but may again be made possible by introducing fresh complement.

The disappearance of free complement in a mixture of antigen and antibody is called fixation of the complement. The condition of the complement in such cases is determined by adding erythrocytes and a specific lytic amboceptor for them; now if the complement has been fixed there will be no hemolysis. This indirect way of testing for antibody or antigen is the basis of Wasserman's test.

Now, if the toxin has its toxiphore group destroyed or modified the haptophore group may still in some cases unite with the cell receptors and stimulate receptor or antitoxin formation. Here the face of the postage stamp is canceled. By passing the toxin-producing germs through animals or by various ways of cultivating them or by physical or chemical treatment the toxic

qualities or potentialities of germs may be modified so that they can be introduced into the animal experimented on and antitoxin produced because the haptophore group remains potent when without such modification the inoculation would be fatal. After partial protection germs of greater virulence may be injected and so on in increasing doses until a large amount of antibody is produced. This antibody may, in some cases, be used to protect fresh animals against the toxic agent. After in this way getting passive immunization active immunization may be induced by the use of germs and toxins. This is done not only in the treatment of disease in man and as a protection against disease, but is of great importance in protecting domestic animals against infection.

A few words on anaphylaxis may not be out of place in our sketch. If a guinea pig is injected with a small amount of horse serum, it will not seem to suffer but if after a certain period it receives a second injection, it will quickly show signs of inspiratory distress and often die quickly. It is then in a state of anaphylaxis toward horse serum. Anaphylaxis seems to be a reaction to proteins rather than to toxins. It seems to be a part of the immunization program of the cells and in this way it has been determined by experiment that when the second injection of horse serum in the guinea pig, for instance, is made the polymorpho nuclears largely leave the systemic circulation and accumulate in the lungs. As F. W. Andrews in the Croonian lectures says they seem to need oxygen to combat the serum invasion and the anaphylactic symptoms are present while the lung is so loaded with the polymorphonuclears. As soon as the cells go back into the general circulation, the anaphylactic symptoms subside. This rush of polymorphonuclears to the lung is marked in immunized animals after the toxic attack. In ordinary infections the entrance of the toxin is slow or at least not in a sudden large amount as in anaphylactic experiments and so immunity is possible. Andrews even proposes the test for leucopenia after infections as an index of immunity. This would make the anaphylactic curve correspond with the antibody curve. Figuratively speaking, the defenses of the body are sufficient for the ordinary toxic invasions but when a massive invasion occurs, there is a panic and the rush of leucocytes to the lungs for ammunition causes leucopenia and anaphylaxis. An unfortunate but fortunately rare example of anaphylaxis occurs sometimes in the use of a second dose of diphtheria antitoxin after an interval of two to several weeks. It is of interest to note that these cases are more apt to occur in asthmatics and particularly in those whose asthmatic attacks are brought on by the odor of horses.

The idiosyncracies of people toward strawberries, crabs, egg albumen, etc., may be of an anaphylactic nature. The whole subject is very interesting but hard to understand. It seems to be a panic of the defensive forces but shows that they are present in the body politic of the cell republic.

The writer feels that too much time has already been taken to go into any of the details of serum therapy and that it is better to be content with this superficial sketch. He feels that the whole subject is of most importance and promises great results in the treatment of infectious diseases and in those conditions like arteriosclerosis, gout and other diseased states where some materies morbi may be at the root of things.

The therapeutics of the past has been almost entirely that of the body but now we are looking forward to therapeutics of the cells.

The Law as it Relates to the Physicians and the Buffalo Health Department.

Dr. FRANCIS E. FRONCZAK, Health Commissioner.
Buffalo, Addendum.

The following paragraph is to be inserted above the next to the last paragraph on Page 479, April issue, and to follow the sentence which ends as follows:

"That would preclude such embalming from a medico-legal standpoint."

If dead bodies are to be cremated instead of buried, an affidavit from the attending physician or Medical Examiner must accompany the death certificate. This affidavit must state that the physician or examiner is acquainted with all the facts and circumstances connected with the death of the deceased, and that, to the best of his knowledge, there exists no reason why the body should not be cremated.

Note: We expect soon to publish a second communication from Dr. Fronczak on the Law Regarding Insanity.

TOPICS OF PUBLIC INTEREST

Standardization of Disinfectants

J. T. Ainslee Walker, F. R. S. M., F. C. S., London; now located at the Whitehall Building, New York City, has asked our co-operation in a movement to secure the standardization of disinfectants. Maryland is the only state thus far exercising control over the sale of such substances.

(EXTRACT from State Board of Health of Maryland, Regulation No. 2—Labeling of Disinfectants. Revised to May 1, 1911.)—All

disinfectants manufactured or sold in this State must bear a label showing the carbolic acid coefficient, or relative germicidal strength of such disinfectants as compared with pure carbolic acid.

In determining the relative germicidal value of disinfectants the application of the Rideal-Walker Test to the typhoid bacillus in a 24 hour bouillon culture may be made, and such results will be accepted until further notice.

The statement of the coefficient should be made as follows:
Carbolic Acid Coefficient 0.3, or 1.2 etc., etc.

This statement may appear on the principal label or on a supplemental label or sticker.

Warren Triennial Prize—Massachusetts General Hospital

THE subject for competition for the year 1913 is on SOME SPECIAL SUBJECT IN PHYSIOLOGY, SURGERY OR PATHOLOGY.

Dissertation must be in English, French or German, typewritten and bound, so as to be easily handled. The name of the writer must be enclosed in a sealed envelope, on which must be written a motto corresponding with one on the accompanying dissertation. The amount of the prize for the year 1913 will be \$500. In case no dissertation is considered sufficiently meritorious, no award will be made. Dissertations will be received until April 14, 1913

FREDERIC A. WASHBURN,
Resident Physician.

Vaccination Statistics

DURING the first three months of 1912, there were reported 283 cases of smallpox in Michigan. The vaccination history of these cases is as follows:

2 cases vaccinated, "50 or 60 years ago"; 3 cases vaccinated, "14 years ago"; 1 case vaccinated, "years ago"; 1 case vaccinated, "at the time of exposure"; 1 case vaccinated, "12 years ago"; 1 case vaccinated, "infancy and again 10 years ago"; 1 case vaccinated, "about 10 years ago"; 1 case vaccinated, "some 20 years ago"; 1 case vaccinated, "one week after exposure"; 10 cases vaccinated, "about 5 years ago" (some doubt); 1 case vaccinated, "some years previous"; 2 cases vaccinated, "in childhood"; 2 cases vaccinated, "when very young"; 1 case vaccinated, "30 years ago"; 8 cases vaccinated, "6 years ago"; 1 case vaccinated, "2 years ago"; 1 case vaccinated, "4 years ago"; 1 case vaccinated, "5 years ago"; 5 cases vaccinated, "doubtful if ever"; 245 cases, "NEVER VACCINATED"; total, 283.

It costs Michigan \$150,000 a year to take care of indigent smallpox patients and to protect the unvaccinated.

R. L. DIXON, Secretary,
Michigan State Board of Health.

Oneida County Provides Hospital Care for All Citizens, Whether Paupers or Self-Supporting

UTICA, April 14th—Governor Dix has signed a bill extending to all of the sick in Oneida County the same opportunity for hospital care as is now provided for those sick with tuberculosis by the county tuberculosis hospital law.

Like many other countries, Oneida has a hospital connected with its almshouse. Recently the county built a large hospital and has decided to separate its management and control entirely from that of the almshouse. The county authorities found many sick persons in the county, especially in the rural sections, who should have hospital care. They are unable to get it in city hospitals and refuse to go to the county hospital if it is necessary to suffer the stigma of pauperism.

Under the new law the hospital will be open to all citizens of the county, whether they are able to pay for their care or not. This is in line with movements in California and other States which provide county hospitals about as they provide public schools.

The control of the hospital will be vested in a Board of Managers consisting of five citizens, two of whom shall be physicians who serve without pay.

There is just one thought that occurs to us in connection with the above: The Poor House, County House, or County Hospital, is about the one method of "pauperization" which ought to be free from the stigma. It does not depend on voluntary charity but is supported by equable public taxation and is maintained on an economic basis. The dependent person in need of care, who accepts this form of charity is indebted only to the public. If he has ever paid taxes, even indirectly, we can see no more reason for feeling that he is pauperized, than if he accepts insurance after having paid the premiums. If he has not been a tax payer, he is pauperized in no truer sense, though perhaps to a greater financial amount, than if he drew a book out of a public library, enjoyed a park provided by the city or state. The person who accepts private charity, asks for special privileges and for support on a higher scale of expense, in a hospital not supported by the public in its official capacity, is really the one that is pauperized.

Universal Peace.

DR. J. A. Riviere, of Paris, Chevalier of the Legion of Honor, and Editor-in-chief of the *Annals of Physico-therapy*, sends us a circular addressed to the members of the International Medical Association against War. Some of the ideas expressed are more progressive and elaborate than the usual pleas for peace as an ethical and economic desideratum. Among these are: the inviolability of the principle of supply and demand; that neither force of numbers nor that of wealth, should overcome the work of the time regulated by free meeting and exchange of thought; that idleness is a crime against society; that the state should study to utilize wasted energy; that dirigibles and aeroplanes should not be used in war; that writings, shows and moving pictures should be used for popular education and uplift; that certain sports which endanger health and life should be regulated.

Chiropodists placed under State Board Regulation.

SINCE 1895, there has been some sort of regulation of chiropody, mainly under the direction of a board elected by the "Pedic Society." There has gradually developed a sentiment for stricter and more impartial regulation and the Chiropodists of America, through their Secretary, have issued a letter from which we quote the following:

The new law just enacted dissolves the Pedic board of examiners and in effect provides that on and after September 1, 1912, no person not heretofore legally authorized to practice shall be permitted to engage in such practice until he shall have been duly licensed so to do by the Regents of the University of the State of New York and on the recommendation of the State Board of Medical Examiners. It then provides in detail for the examination and the qualifications of the applicants and of schools intending to teach chiropody and also for the issuance of licenses and the revocation of same, all under the sole supervision of the Board of Regents in connection with the State Medical Board and it gives the Regents plenary power to work with.

The bill was drawn after consultation with the Education Department and has its approval and also the approval of the State Medical Board.

The Pedic Society of the State of New York fully indorsed this bill, believing that the best interests of all concerned will be conserved thereby. The registered chiropodists of this State in no wise conflict with the medical profession, as physicians consider it *infra dig.* to practice chiropody, and in most instances send persons having corns, warts, callosities, ingrowing nails and

bunions to chiropodists. In these instances proficient services should in all respects be forthcoming, and there is no better way of perfecting the services than by placing the examining power and all the authority in this matter in the hands of the Regents and the State Medical Board.

New Jersey has a law similar to the proposed law which provides that the examinations be in the hands of the Board of State Medical Examiners. As there is no Board of Regents in New Jersey, there is no provision for such a Board in the New Jersey chiropody law. The same has worked very satisfactorily and a number of other States have enacted or are about to enact similar laws.

Tuberculosis.

THERE has been a controversy between Dr. Charles S. Prest of the State Health Department and Dr. George Washington Goler, Health Commissioner of Rochester, as to the law regarding disinfection after tuberculosis. Mr. Homer Folks states that the law does not compel physicians to disinfect, thus supporting Dr. Goler.

Lockport has secured a visiting nurse for tuberculosis cases—Miss Mary G. O'Donnell, late of Bay View Hospital, Baltimore. At the beginning, her salary will be paid by funds raised from the sale of red cross stamps and private contributions. Later, it is hoped that the city will support the work. Commencing her duties on April 4, she visited 23 victims in the next two weeks and found a number of cases not previously known to the health board.

Tonawanda and North Tonawanda have voted \$175 apiece for expenses of the Tuberculosis exhibit to be held in the armory on Delaware Street, May 5 to 10, under the direction of the State Board of Health.

NEW Jersey has just passed a stringent anti-tuberculosis law. Every tuberculosis case refusing to obey regulations of the State Board of Health, shall be compulsorily segregated in special institutions which the counties must provide by Oct. 1, 1912. If the patient's family is unable to pay, the State will reimburse the County at the rate of \$3.00 weekly. Maryland has a similar law but less drastic. San Francisco is the only city in the country which has a similar ordinance, but New York and several other cities exercise the same power by construction of more general ordinances.

The National Association for the Study and Prevention of Tuberculosis, while approving these laws, holds that "a consump-

tive who exercises sufficient precautions in the disposal of his sputum need not be a menace to anyone." With this, highly approved dictum, we venture to disagree. If all tubercle bacilli were contained in sputum voluntarily spit out, the dictum would be correct. But, how about faeces, urine, other discharges? Healthy persons sneeze, cough, drool at night, use their handkerchiefs, moisten their lips, and make various reflex or unguarded voluntary movements which bring fingers thus moistened, in contact with hair, clothing, towels, etc. We all use from 25 to 50 different table utensils at a meal. There is also, in the terminal stage of tuberculosis, a period of days or sometimes even months, in which no one can be careful or conscientious, being either unconscious or in such a state of hebetude as to be irresponsible. With abundant facilities for the prompt disinfection of clothing, linen, dishes, etc., and with rooms built so as to be readily sterilized, the contamination may be counteracted. In a house or flat of ordinary construction, with many cracks, with porous floors, wall, and furnishings, with practically no part either air tight or water tight and many parts or whole rooms almost sun-tight, we fail to see how contamination can fail to become considerable, as days lengthen to weeks and months, and the thousand to one chances against infection are multiplied by a million. And how can disinfection be practiced, so as to be at the same time efficient and economically possible?

Water Supplies.

MIDDLEPORT will soon install a water supply at a cost of about \$50,000 and sewerage at a cost of \$35,000. The plans and specifications have been approved at Albany and bids are being considered. There will be a pumping station, stand pipe and about ten miles of water mains.

Corning faces the necessity of filtering her present water supply or seeking a different source. • Dr. F. S. Swain, the Health Officer, Dr. E. H. Hutton and Mr. W. T. Moran have been appointed a committee to investigate. An epidemic of typhoid is in progress.

The Niagara Frontier Pure Water Conference representing especially, Buffalo, the Tonawandas, Lockport and Niagara Falls, will hold a dinner May 10, 1912, in the Armory at Tonawanda. Dr. Eugene H. Porter, State Health Commissioner will speak and it is hoped that the Secretary of War, Henry L. Stimson, will attend. The object of this conference is not merely to secure local improvements but to further international legislation to abolish contamination of the entire Great Lakes system, including tributaries. Congressman James S. Simmons of Niagara

Falls, has already introduced a bill with this object in view, and this bill is favored by the conference and, indeed, may be passed at the present session of congress.

MAYOR KELLER, of Niagara Falls, after consulting the members of the water commission, has asked State Health Commissioner Eugene H. Porter, to close the private water works till their filter plant is completed or to get a supply of wholesome (?) water from municipal mains.

THE STATE INSTITUTE FOR THE INVESTIGATION OF MALIGNANT DISEASE, has received bids for the construction of a cancer hospital, to be conducted in connection with the Gratwick Laboratory. The lowest bidder was the Eastern Concrete Steel Co., \$65,219. The highest bid was for \$77,113. All bids were by Buffalo firms.

LONG Hat Pins are now forbidden by law in New Orleans Freak legislation, isn't it—until you have known of case when a pin did penetrate an eye?

ECONOMY IN ADMINISTRATION OF THE HEALTH DEPARTMENT OF BATAVIA. Last year, a la carte examination of cultures for diphtheria, cost \$6,000, owing to the prevalence of this disease. This year, the Board of Health has fixed the salary of the Health Officer at \$600, with an allowance of \$100 for expenses. This is an American plan rate, for taking and examining cultures, fumigating, etc. As a taxpayer, we are heartily in favor of economy and we believe that, when the medical work of a governmental unit, or even of an institution reaches sufficient bulk, it is perfectly proper to contract for the services of a physician or pathologist or other expert, instead of paying the retail rates equally just and proper for an occasional service. But, we question seriously whether there is to be expected any such fluctuation in amount of work as the figures indicate and we believe, that, whatever system is employed, a fair rate should be insisted upon.

DUNKIRK has instituted a municipal laboratory for the examination of water, milk, etc., and for making "blood tests," whatever that may imply. Dr. C. E. Hollenbeck has been engaged as director at a salary of \$25 a month. Thus is the medical profession waxing rich at the expense of the poor taxpayers. Can nothing be done to deplete such plethora?

THE LEGAL AID BUREAU OF BUFFALO, with offices at 448 Ellicott Square, has been established for a purpose clearly indicated by its title. Medical dispensaries, free to the poor have been operated for several centuries and the question has often been asked why there were not similar legal dispensaries. To a certain extent, the assignment of a lawyer by the court to defend a poor man under criminal charge, the method—not generally favored—of conducting civil cases on a percentage basis, and the solicitation of legal aid by private individuals and philanthropic institutions, of lawyers, for definite cases, have filled the vacancy but there is no question but that this Bureau will fill a long felt need. There is only one thing about the prospectus that we do not quite like—the solicitation of financial aid from the medical profession, which is already conducting a precisely analogous charity on a far larger scale and which has more than enough other demands on his meagre earnings.

THE State Department of Health will hold Institutes for the instruction of local health officers, in Chemung, Steuben, Tioga, Schuyler, Yates, Livingston, Broome, Allegany, Cortland and Tompkins Counties, during the next few months.

ON Wednesday, April 17, the German Deaconess Hospital graduated a class of eight nurses. Two of them, by the way, have German names.

A FIRE occurred April 20, in the locker-room of the University of Buffalo. Dr. James A. Gibson, superintendent of the building, discovered the fire, and with the help of several students, extinguished it without turning in an alarm.

The damage amounts to about \$50.00.

Cost of Food.

MAYOR Shank of Indianapolis addressed the Housewives' League of Buffalo, April 19, detailing some of his work as voluntary purchasing agent and showing the relatively enormous cutting of middle men's profits possible. It is a sign of awakening common sense that people are no longer afraid of being called "tight-wads" for exercising the same supervision over food prices as those of clothes, rent, heating, etc.

Recently, we had had occasion to glance through several account books, dating back to 1855 in Buffalo, to about 1840 in Albany, even then regarded as an expensive city in which to live, and, in the country to about 1790. With many exceptions and with due allowance for differences in local conditions and scale of living, it has impressed us that the principal general

increases have been in food stuffs, in labor directly employed, and in luxuries. Rent, for example, has diminished rather than increased, if we allow for the difference in plumbing, maintenance and the fact that taxes, largely derived from landlords, cover enormous expenditures for education, philanthropy and general enjoyment and welfare.

However, the Bureau of Commerce and Labor, presents some statistics showing that we are increasing our imports of food stuffs. In so far as the import are of supplies not grown at home—tea, coffee, cocoa, etc.—the matter is serious only in indicating an increased use of mild stimulants and the constant increase of price. Allowing for difference in population, the importation of alcoholics has shown little increase in 10 years. But, when in February, we imported $2\frac{1}{2}$ million dollars' worth of potatoes, as much as the average importation for a year, we begin to realize that we are not so literally self-supporting as we should be. The importation of fruits and nuts, perhaps indicates a wholesome dietetic tendency and the falling off in imports of raisins and oranges shows that our home production is increasing. But in going outside to buy a million and a half dollars' worth of wheat and flour, nearly six million dollars' worth of cheese, and many more million dollars' worth of goods that are merely dietetic equivalents of home products, in eight months, we acknowledge an inherent weakness.

Duty of Layman to Report Contagious Disease.

FROM Feb. 1 to 26, the little daughter of Mr. W. E. Robertson, a prominent Buffalo business man was out of school and was said to have had Christian Science treatment. Investigation by the health department resulted in a diagnosis of scarlet fever and suit was brought against the father for failure to report the case. On April 11, a verdict of no cause of action was brought in, although the Health Department, through the District Attorney will endeavor to reopen the case. This is the first time that a layman has been on trial under the ordinance requiring contagious diseases to be reported.

After reviewing the legal aspects of the passage of the ordinance and declaring that it is a perfectly sound one from the legal viewpoint, Judge Hager said: "You are not to pass on the reasonableness or unreasonableness of the ordinance; that is a matter for the court. The issue in this case is this: Did the daughter of this defendant have scarlet fever or did she not? If you decide that she did have scarlet fever, then you must decide whether or not this defendant acted in good faith in not reporting the case to the department of health."

Council for the defendant plead that the matter of Christian Science attendance had nothing to do with the case, and laid stress on the question of good faith of the defendant and reasonableness of the ordinance, pointing out the errors in diagnosis made by physicians, and even by the Health Department itself in placing together in the Contagious Hospital, well developed and merely suspected cases. The District Attorney, on the other hand asked the judge to charge the jury that, if he did not know that the child had scarlet fever and failed to report the case which proved actually to be one of scarlet fever, that he was guilty of violating the ordinance. This, as implied above, the judge refused to do and, in fact, charged in an exactly contrary manner.

It is extremely difficult to make satisfactory comment on this case. Naturally, we do not believe in Christian Science but we do believe very thoroughly in what used to be an American policy of individual liberty, provided that the execution of the policy does not endanger others. However, we need not enter into this discussion except as it bears on the question of the duty of a parent or guardian to provide legally qualified medical attendance for a child. Here again, it is obviously difficult to frame a satisfactory law so as to steer between the Scylla of neglect and the Charybdis of calling the doctor for every headache or hysteric tendency. In the present case, the child recovered and, apparently, was not seriously sick.

It is also obvious that, without working injustice to perfectly innocent offenders and requiring a diagnostic acumen that even our profession does not possess, some allowance must be made in the application of any law on this subject, if indeed the working of a law according to the strictest ideas, would not in itself be contrary to the spirit and precedent of law in general.

We have a slight business acquaintance with Mr. Robertson, sufficient to express entire confidence in his intention to do his duty as a father and a citizen. It is unfortunate that this case establishes a precedent which may be used to subvert the ordinance even in plain cases of serious contagious disease, with neglect to provide medical attendance.

DR. R. M. PEARCE, Professor of Research Medicine at the University of Pennsylvania, will deliver at the Syracuse Medical School the annual Alpha Omega Alpha address of the Gamma of New York Chapter on May 21. The title of the address is "Medical Education." The address will be delivered at the annual public meeting of the chapter at 8.30 P. M. in the Hia-

watha Room of the Onondaga. At 6.30 P. M. Dr. Pearce will be the guest of honor of members of the fraternity at their annual dinner at the Onondaga.

Medical Interne. Government Hospital for the Insane.

EXAMINATIONS will be held June 5, 1912, at various places, for eligibles. At least two vacancies are to be filled. The positions are for a year, paying \$50.00 a month and maintenance, with opportunities for promotion if desired. Applications are limited to men graduated not more than two years, unless they have been continuously engaged in hospital or laboratory work. Applications should be made promptly to the U. S. Civil Service Commission, Washington, for blank No. 1312.

New Inventions.

1,022,459. Fresh-Air Sleeping Hood. Albert Bennett, Seattle, Washington.

1,022,507. Baby-Holder Attachment for Cribs, etc. Marion J. Ross, Boston, Massachusetts.

1,022,601. Vaginal Syringe. Sven S. Rumberg, Batavia, and Felix C. Hartlung, Chicago, Illinois.

1,022,606. Microscope. Karl M. Stahl, New York, N. Y.

1,022,627. Medicinal Bath. Albert Hempel, Leipsig-Oetzsch, Germany.

1,022,645. Pharmaceutical Product. Ludwig Taub and Hans Hahl, Elberfeld, Germany. Assignors to Friedr. Bayer & Co., Elberfeld, Germany.

1,022,894. Catamenial Napkin. Elizabeth Sprague, Minneapolis, Minnesota.

1,022,443. Bottle Stopper, Maurice W. Send, Detroit, Michigan.

1,022,444. 2-Phenylquinolin 4-Carboxylic-Acid Ester Ludwig Taub, Elberfeld, Germany.

1,022,491. Fumigator, Peter McCarthy Judson and Edward Michmershurzen, Holland, Michigan.

1,022,548. Drinking Cup, August H. Hartman, Seattle, Washington.

1,023,042. Syringe, Allen E. Scott, San Francisco, Cal.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

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Sanitary Science is mainly applied decency.

The Water Supply of Buffalo

One of Col. Potter's editorials, reported in abstract from the issue of February, 1907

THE question of pure water supply for Buffalo is again being agitated. The people of the city, if they have anything to say about the matter at all, say it in the privacy of their own homes when they see the muddy water which is their portion after every little wind storm, and they say what they have to say where it can not affect their standing as christians and law-abiding people. It is difficult to understand just why Buffalo, situated as it is, at the very threshold of unlimited supply, should be so ill-provided with so necessary an article as pure water.

* * * * *

There has been water talk enough to saturate a dozen cities of the size of Buffalo.

* * * * *

The latest effort to get something like a human idea of what the situation really is—the consideration of the water question in its broadest sense by the Academy of Medicine at a recent meeting,—was productive of nothing at all except a triple row of damnations from Col. Ward, the Commissioner of Public Works.

* * * * *

St. Louis, Boston, Washington and other cities have been through the same trouble; the only difference is that these cities have met the difficulty promptly—whether adequately or not, need not be here considered at this time.

What Buffalo needs is civic surgery.

At present there is every probability that the proposed new intake to the Emerald channel will be three years building. 'Till then, Buffalo will suffer for water.

The Titanic Disaster.

So much has been said of the terrible disaster that we shall try, difficult as may be, to limit ourselves to a cold-blooded consideration of certain phases not too remote from medical science. In the February issue, referring to the Equitable Building fire, we suggested that a study of caloric values, quite in analogy to that of the dietetician, might have a practical bearing in establishing quantitative though approximate estimates of the amount of combustible material that might safely be allowed in the structure and contents of buildings. In the present connection, we would suggest as a text to the officers of steamship companies: $M = v w$. Momentum equals the product of velocity and weight. It ought to be possible to establish pretty accurately, the resistance of various parts of a ship. Knowing w , the weight or displacement of the ship, it should be possible to establish a maximum value for v , the velocity, in case of danger of collision either with another ship, an iceberg or a rock.

Expert sailors declare that the average well built ship of say 10,000 to 20,000 tons, can outride any storm, if there is plenty of sea room; that with reasonable caution as to lights and whistles, there is practically no danger of collision, even in a fog, with another vessel, provided of course that both vessels are carefully conducted; that, unless prevented from making observations, or driven by a storm, there is no danger of striking a rock; but that the danger of icebergs remains paramount.

Four years ago, but almost a month later in the season, and in a milder season, at that, we had some opportunity to note how a careful captain would solve the above equation for v . For two entire days, we averaged about seven miles an hour, never exceeding ten, and sometimes merely floating when more expert eyes than ours could differentiate ice from fog. This was for a vessel of about a quarter of the tonnage of the Titanic. The mere fact that the enormous dimensions of the Titanic do not show a tonnage displacement corresponding to the cube of similar diameters, indicates that bigness and strength are not synonymous. If the resistance of individual parts were equal on the small and the big ship, it is obvious that the latter should, with equal caution, have proceeded at a rate of less than two miles an hour, and that, in any event, a very slow speed was required, quite ignoring the important fact that a small ship can be handled

and stopped much more quickly than a large one. In advance of definite testimony, it was assumed that the Titanic was making about 15 miles an hour, and struck head-on with a momentum graphically compared to that of 37 Empire State express trains at 70 miles an hour. It was asserted—and readily conceded by non-expert readers,—that this momentum would shear off bolts and otherwise disrupt the water-tight compartments throughout. The fact seems to be that the speed was 20—23 knots (approximately 25 land miles) an hour and that the ice was seen just in time to allow a rapid turn which caused practically the whole side of the ship to be torn, and that this fatal traumatism caused an almost imperceptible shock. As an instance of the difficulty of passing judgment in technical matters, it is now stated that, while the officer on the bridge acted properly in making the turn, if a head-on collision had been allowed, the ship would probably have floated.

The discussion of physical forces may seem academic, but it has a practical side, which should be legally established, on the mathematic basis.

We do not intend to throw blame on the captain of the Titanic. The mere fact that this, and other ships were following the northern route; that the presence of icebergs was well known, that the Titanic herself had transmitted a report of their observation only about one hour's average run from her position at the time, and that she struck about two hours afterward, shows that a tangible risk was being run, which no sane man would have incurred without orders. We must consider something more than the momentum of velocity and weight. It has been estimated that a few prominent passengers on the Titanic, represented nearly 200 million dollars; that five to ten million dollars' worth of jewelry were worn, or ready to be worn, on the ship; many of the passengers were of weight aside from money and social standing. It was the initial trip of the greatest boat that had ever been built. The whole civilized world was interested. While not built to rival the recent speed records, a schedule was expected about as short as the shortest even five years ago. The manager of the line was on board. This was the momentum. It struck a human being, a captain of long experience, who had never had, scarcely ever seen a marine disaster. He was careful, conscientious, in supreme authority, until he reached land. He could have taken the southern course, he could have kept the ship barely moving for several days. And then, even before his arrival, thanks to wireless, he would have been the employee, who had disgraced a great com-

pany, who had shown the white feather, who had offended that part of the community which, on account of its wealth, demands promptness, obedience, good service. That was the object on which the momentum was expended.

The result of the physical and psychic momentum was a mortality, in a space of at most four hours, approximately equivalent to that for a whole year, of a city of 100,000 inhabitants—*Albany for example. This was a preventable mortality, preventable by the simple means of working out comparatively simple problems in elementary physics.

By the way, will this mortality show in the vital statistics? If so, where? If not, should it? If these—and many similar, scattered deaths remain unaccounted for in our tables, how will they affect subsequent statistics?

The necessity of an adequate supply of life boats might seem to require no comment but one point in this connection seems not to have occurred to the multitude of writers on the subject. Up to recently there has been a growing opinion—which as a passenger we confess to have shared—that a life boat was either entirely useless or afforded a very doubtful chance of saving life and was rather a means of prolonging the inevitable suffering of a wreck. The prevalent ignorance of swimming by deep sea sailors is another expression of the same thought. With the development of wireless telegraphy, and the increase of risk inherent to the ship, such as dangerous speed, explosion of boilers, dropping of heavy engines through the bottom, etc., the value of the life boat again becomes worth the attention of business interests and of the law.

Density of Population

IN a previous editorial, dealing with openings for medical men in the country, we made a rough estimate of 30 per square mile for rural population. The Bureau of the Census has just issued an interesting Bulletin regarding the population of New York State. The actual rural population proves to be as follows: (ignoring fractions).

Erie Co.69	Monroe Co.88	Livingston Co. ...50
Niagara Co. ...60	Genesee Co. ...45	Ontario Co.50
Chautauqua Co. 43	Orleans Co. ...54	Wyoming Co.40
Cattaraugus Co.34	Wayne Co.61	Seneca Co.49

But as the inhabitants of villages of less than 2,500 are included in the rural population, our estimate is probably nearly correct.

*Actually the death rate of Albany is much higher than the average.

The Bulletin, however, deserves study from a broader sociologic standpoint. Ignoring, for present purposes, the matter of urban population, which also has a paramount influence on the total density of population for any county containing a good-sized city, we note the following points of interest regarding rural (including village) population:

The most sparsely populated county is Hamilton: 2.6 per sq. mile. The adjacent counties: Lewis, Hamilton, Herkimer and Essex, range up to 18 per square mile.

The seven counties in or near New York City either have no truly rural population at all (in the inclusive sense defined) or have, even outside of towns of over 2,500, a population at least as dense as 90 per square mile.

Otherwise, the rural population of the whole state ranges from 18 to 90 per square mile, the counties of the southern tier and the northern curve ranging below 45, most of the central and western counties above 45.

In regard to proportionate increase of population, it is noteworthy that New York City includes a trifle more than 52 per cent. of the entire population, having risen from 39 per cent. in 1890. In the same period, the distinctly urban population from the sociologic standpoint, i. e., in cities of 100,000 and more, aside from New York, has increased from 6.5 per cent. to 9.6 per cent. In cities of 10,000 up to 100,000, there has been a slight reduction, from 13.2 to 12.3 per cent. In smaller towns, there has been a moderate increase in number, especially of those between 2,500 and 5,000, but a slight decrease of percentage of aggregate population. Of the rural population including that of villages of less than 2,500, there has been an actual diminution of about 250,000 in 20 years, and a percentage decrease from 30 to 17 per cent.

Fifteen counties show an actual decrease in total population in the last ten years, in some insignificant, in others amounting to more than 10 per cent. But about 35 counties show a decrease in rural population.

We must confess, however, not to feel the apprehension as to the future welfare of the country, which such statistics arouse in the orthodox. To a considerable degree, the concentration of population in cities of the second magnitude, by which term we mean, approximately 100,000 to 500,000, is due to the normal growth of individual communities. One city swinging from 90,000 to 100,000, as it properly should, in a decade, increases the distinctly urban population by considerably more than 1 per cent. and correspondingly diminishes the population of the next group, taking the total population of the State as 100 per cent. There

are now four cities between 50,000 and 100,000, with an average population of over 75,000. A perfectly wholesome industrial growth of these would throw 400,000 more of our population from one arbitrary division to another by the next census and, if we estimate the total population of the State at about 11,000,000 in 1920, this will mean an addition of about 4 per cent. to the higher division and a corresponding subtraction from the lower.

Towns from 10,000 down, on the whole, show a tendency to diminution. To some extent, this is relative, due to the greater drawing power of large cities; to some extent it is due to the passing of a prosperous town from one division to a higher one. In some cases, there is an actual lessening of population. For such sociologists as deplore this tendency, we would recommend a sojourn of some months in the average town of a few thousand. We think they would then realize that if a town of this size does not tend by its own momentum to pass into a higher division, it is no place for an ambitious young man or woman or family. Indeed, the village is neither hay nor grass. Unless transformed into a miniature city by some industrial enterprise, it does not directly produce anything and unless controlled by an unusually powerful and successful public spirit, it possesses most of the temptations of a city and few of the uplifting influences of the latter.

As to the decline of the rural population, it should be remembered that the open country is, virtually, a factory of hay, grain, vegetables, fruits, wool and meat. Why should it be overmanned? Why should not the invention of labor saving machinery result in an economy of labor here as well as in a factory producing steel, automobiles, clothing, typewriters, etc? Instead of deploring, in glittering generalities, the evil of concentration of population in cities, why not look at the matter from the common-sense standpoint of utilizing the energy of its inhabitants and of enabling them to do the best for themselves and for the community at large. We may be pardoned a personal application. Yates Co. shows a decrease of over 10 per cent. of its population in the last ten years. Except Penn Yan, there is not a community in it that would give full scope to the average man, except for a few physicians, lawyers, clergymen, teachers, and the ordinary personnel of a small village. There is no water power or other natural advantage that would warrant the development of more than minor commercial enterprises, such as the manufacture of grape baskets and the usual run of local businesses for the convenience of an agricultural population. A good deal of what was once farming land on side hills, has been converted into vineyards, resulting in the great advantage of the owners. Labor in vineyards is largely done by non-residents,

in the late summer season, redounding to the health of the laborers and not materially interfering with their regular and more profitable, labor in factories, offices and even schools—for many are students and teachers—in cities. We are familiar with every foot of a farm which, some sixty years ago, supported six related families. It is now conducted by one family, more productively, and supports about six persons. Probably the six families multiplied by two or three generations of increase, could still find the necessities of life on the same farm but they would be living on a scale little better than that of the Chinese peasantry. As it is, the same families represent the conduct of one of the most influential newspapers in the land, one of the most practical minor developments of electricity, educational work of the highest grade in several institutions, professional and commercial as well as agricultural industry in several states. Let sociology dry its tears on the handkerchief of common sense.

There is one more point, of special interest to the medical profession. The death rate—which means also the rate of incidence of disease and, in a negative sense, human efficiency and happiness—is now slightly less for the urban than for the rural population. When we recall the tendency of the superannuated farmer to withdraw to a town to spend the last few years of life; and count the number of the fatal cases charged to cities, but which have come from the country to make a last desperate effort for cure by operation or expert medical treatment, we must conclude that the strictly urban mortality is really a good deal less than that of the open country. The trite moralizing of the fourth reader must be revised.

OUR CONTEMPORARIES

Our Exchanges of 1845

DURING the first year of existence of the *BUFFALO MEDICAL JOURNAL* (1845), the editor, Dr. Austin Flint, printed a brief description of each of his exchanges, covering all of the American medical journals known to him. It may be of interest to reproduce his description.

The *American Journal of the Medical Sciences*, the oldest in existence 26 years at that time, published quarterly, at least 264 pages, \$5.00 per annum, Lea & Blanchard, accompanied by a monthly of 32 pages devoted to general medical intelligence and republication of standard works. This is still in existence, as a monthly of the highest order.

Other Philadelphia journals were: *Bulletin of Medical Sciences*, 35 pages, monthly, published in connection with the

Select Medical Library. *Medical Examiner, Journal of Pharmacy, Journal and Library of Dental Science, Stockton's Dental Intelligencer*. Details are given only of the first and last, 35 and 24 pages respectively, both monthly and both costing a dollar a year.

New Orleans Medical and Surgical Journal, bi-monthly, 140 pages, \$5.00 per annum. "This is one of our ablest contemporaries," a remark which, without the quotation marks, holds good in 1912. This journal was established the year before the *BUFFALO MEDICAL JOURNAL*. At present it is a monthly of about 85 pages.

Southern Medical and Surgical Journal, Augusta, Ga., 64 pages, monthly, \$3.00 per annum, edited by Drs. Eve and Garvin.

Southern Journal of Medicine and Pharmacy, Charleston, bi-monthly, 120 pages, \$4.00 per annum, established in 1845.

Western Journal of Medicine and Surgery, Louisville, monthly, 90 pages, \$5.00.

Western Lancet, Lexington, Ky., monthly, 50 pages, \$3.00.

St. Louis Medical and Surgical Journal, monthly, 40 pages, \$3.00. *Missouri Medical and Surgical Journal*, monthly, 24 pages, \$2.00, also published in St. Louis.

Illinois Medical and Surgical Journal, Chicago, monthly, 16 pages, \$1.00.

The Boston Medical Journal "is a weekly or monthly as its patrons elect." (Apparently, this means that subscriptions were taken for one issue a month). It was the only weekly in the country, \$3.00. It is also the oldest journal in America, except the *American Journal of the Medical Sciences*.

Journal of Health, Boston, monthly, 24 pages, \$1.00, established 1845.

American Journal of Insanity, Utica, 96 pages, quarterly, \$1.00.

Our distinguished predecessor alludes to Philadelphia as "hitherto if not still, the Medical Paris of America." "New York has hitherto been unfortunate in her medical periodicals; those which have at successive periods been established, have been short lived." Only two are mentioned as extant: *New York Journal of Medicine and Collateral Sciences*, six years old, bi-monthly, 144 pages, \$3.00; *Medical and Surgical Reporter*, bi-weekly, 16 pages, \$2.00.

The foregoing are stated to be all of the medical publications of the country with which the editor is acquainted, even by title. A single Canadian journal is mentioned: *British-American Journal of Medical and Physical Science*, monthly, 27 pages, \$3.00, lately sprung from the ashes of the *Montreal Gazette*.

At present, according to H. R. Harrower's compilation, there are 123 regular medical journals on general medicine, 65 on specialties, and about 150 others, variously classified and bearing more or less on medicine.

With due allowance for errors in compilation, it appears that the BUFFALO MEDICAL JOURNAL ranks fourth in age, for America, being antedated by the *American Journal of the Medical Sciences*, the *Boston Medical and Surgical Journal* and, by a few issues, by the *New Orleans Medical and Surgical Journal*.

THE *American Practitioner and News*, published for forty-five years in Louisville, Ky., and *The New England Medical Monthly* with *The Annals of Medical Practice*, established in Boston, since 1888, are now combined into *The American Practitioner*, issued monthly from No. 80 Washington Square, East, New York City, under the editorship of John W. Wainwright.

At the risk of being accused of possessing a specialist's myopia, we recommend to all our readers, the *American Journal of Gastro-enterology* published quarterly in Philadelphia, and Edited by Dr. Lewis Brinton. We may certainly disclaim anything more than a friendly interest, as our connexion with that journal is purely honorary.

IN June the *American Journal of Surgery* will issue a number composed of original contributions from men of recognized prominence in the medical profession residing in Greater New York. Among those to contribute are Herman J. Boldt, C. U. Dowd, Meddaugh Dunning, Wm. S. Gottheil, E. L. Keys, Jr., Howard Lilienthal, Chas. H. May, Willy Meyer, Robert T. Morris, S. Lewis Pilcher, John O. Polak, James P. Tuttle, James P. Warbasse and others.

WE do not as a rule endorse therapeutic suggestions from laymen, nor do we believe in spring tonics but this, from the *Farm Journal* of Philadelphia is about the best we have seen:

An excellent spring tonic, after several months of hovering around the fireside, is a good sawbuck, a sharp saw and a pile of hard wood. We know it for we have tried it.

IN an article on the treatment of sick children in the *March Woman's Home Companion*, the author Dr. Roger H. Dennett, a famous New York specialist on the disease of children says:

"Never, never, expose the child to any contagious disease in order that he may have it once and be done with it. Even the so-called simple children's disease, such as measles or whooping-cough, have a death-rate that is appalling."

WE would call the attention of our readers to the great practical value of the State and Municipal Bulletins. These are—or will be—sent to every physician so that we need not refer to them in detail.

FOR SALE: A perfectly good though much used copy of Mrs. Eddy's book. Presented by the former owner to her physician at the successful termination of a claim in the ear, the error taking the material form of pus. Neither the present nor the former owner has any further use for it but can endorse it in the highest terms since, under its influence, sickness was non-material for several years.

PERSONAL

It gives us much pleasure to record two well deserved honors that have recently come to a life-long friend, Dr. Herbert Upham Williams of Buffalo. He has been made Acting Dean of the Medical Department of the University of Buffalo, vice Dr. M. D. Mann, resigned. On April 5, he was elected President of the American Association of Pathologists and Bacteriologists, at its meeting in Philadelphia. Dr. Williams is one of a comparatively small number of men who have found pathology broad enough to be used for the foundation of a life-work instead of a stepping stone. To such men we owe both the quantity of experience and the maturity of judgement so much needed in the establishment of a science. His work has been thorough rather than brilliant. Thus far, he has discovered no new disease nor disease germ. When he does, it will not be connected with tetrerythism.

MRS. LENORA WHEELER GAY's Registry for Nurses has been removed to 723 Prospect Ave., Buffalo.

DR. A. L. BORDEN of Gowanda has recovered \$200 damages from the town of Evans, on account of a boulder in a road with which his automobile collided.

DR. FREDERICK P. HOYER of Tonawanda, the oldest Mason in the state, will celebrate his 90th birthday, May 9.

DR. B. ROSS NAIRN of Buffalo, has moved to 512 Franklin St.

DR. G. A. NEIL of Buffalo, has moved from 1315 to 1278 Jefferson St.

DR. EDGAR BIEBER has been appointed resident physician at the Ernest Wende Hospital, Buffalo, vice Dr. L. G. Lewis, resigned.

DR. EDITH R. HATCH has been elected a director of the City (Buffalo) Federation of Women's Clubs.

DR. C. E. BOWMAN of Alden returned from a southern trip, about the 1st of April.

DR. C. A. TYLOR of Alden has recently had a severe illness but is recovering.

DR. L. R. COLEGROVE of Elmira visied in Buffalo early in April.

DR. EDWARD CLARK of Buffalo spent Easter week at Old Point Comfort.

DR. JOHN O. ROE of Rochester has recently returned from a trip to Panama. He has promised a description of phases of the canal work that would interest our readers.

DR. NATHAN JACOBSON of Syracuse has returned from the Bermudas.

DR. FAYETTE H. PECK of Utica has returned from Europe.

DR. C. F. CHAFFE of Rochester has moved to 34 Gerard St.

DR. W. W. PLUMMER of Buffalo, read a paper on Fractures, illustrated with x-ray plates, before the Dunkirk and Fredonia Medical Society, April 10.

DR. E. R. LINKLATER of Buffalo, has recovered from a serious illness and is again at work.

DR. EVELINE P. BALLINTINE of Rochester State Hospital, has recently visited relatives in Warsaw.

DR. C. E. ABBOTT of Buffalo has been spending some time recently at the Chalfonte, Atlantic City.

DR. CURTISS N. JAMESON, Rochester, has removed his office to 330 West Avenue.

DR. ROBERT L. CARSON, Rochester, has removed his office to 54 Gibbs Street.

DR. FREDERICK W. SEYMOUR, Rochester, has removed to 355 East Ave.

DR. HARRY J. BRAYTON for four years a member of staff at the Raybrook State Tuberculosis Sanitarium, has been appointed

Medical officer of Iola Sanitarium, the County Tuberculosis Sanitarium of Monroe County.

DR. J. F. W. WHITBECK of Rochester, has been elected president of the State Medical Society. The annual meeting will be held in Rochester in April next year.

OBITUARY

DR. CHARLES SMITH of Campbell, Steuben Co., died suddenly March 29, 1912 of what was termed acute indigestion. He was born in Cameron, a neighboring town, 47 years ago. He was a graduate of the University of Buffalo, 1890.

DR. PAUL C. FREER, director of the U. S. scientific bureau, who was mentioned as a possible successor to Dr. Wiley, died April 17, 1912. He was born in Chicago in 1862, was graduated at Rush Medical College and took postgraduate courses at the University of Munich. He was formerly Professor of Chemistry at the University of Michigan.

DR. LEWIS NELSON, an instructor in the Harvard Medical School died April 15, 1912, from an infection with the bacillus aerogenes capsulatus, received in some researches that he was making.

DR. WM. H. BARCROFT, of Coshockton, Ohio, a graduate of Starling (Columbus) Medical College, 1875, started to make a professional call on March 17, and was found frozen to death in field, March 23. He was 59 years old. Here are two phases of medical heroism and martyrdom, as different as possible in detail, identical in spirit, equal in honor and value, if not in glory.

DR. JOHN HERR MUSSER, whose father, grandfather, and great grandfather were also physicians, was born June 22, 1856, at Strasbourg, Pa. He graduated in medicine at the University of Pennsylvania in 1877 and practiced in Philadelphia up to the time of his death, which occurred April 3, 1912, of angina pectoris. From quiz master, he was promoted, step by step, to the professorship of clinical medicine at the University of Pennsylvania, in spite of the old precedent of selection from prominent Philadelphia families, a precedent from which the University has departed more and more often of late years. Aside from his college and hospital connections, Dr. Musser was President of the A. M. A. 1903-4, and of many other organizations, at one

time or another. His Medical Diagnosis, is a standard and his services as editor in Nothnagel's cyclopaedia and as joint author with A. O. J. Kelly in preparing a system of therapeutics, as well as his contributions to current literature, will live after him. He was also active in various phases of philanthropy and good citizenship. One of his legacies to the profession is his brain, which is the property of the Wistar Institute of Anatomy but which will be subjected to the critical study of a number of institutions. In passing, it may be said that the same institution also possesses the brain of the late Dr. Waldemar Koch of Chicago. What makes this legacy particularly valuable, in Dr. Musser's case, is the absolute normality of his mind. He had none of the eccentricities of genius, no one would have called him brilliant, he was evenly balanced in his interests, not only in the sense that he was not a specialist except as the word internist indicates a lopping off of certain forms of practice, but in the sense that as a physician, he was both practical and scientific. He wrote and read much but he was neither book-worm nor author in the exclusive sense. He was a teacher, but a teacher of things that he had seen. More than this, his symmetric medical development was, itself, balanced by his development as a moral, sensible, kindly man, of broad sympathies and interests, yet with too stable judgment to allow us to designate him as versatile. With an acquaintance beginning in Philadelphia as a student, many years ago, and kept up partly by correspondence, partly by meetings of societies, we feel a keen sense of personal loss in Dr. Musser's death. His greatness grows with contemplation and nearness of approach, like that of a massive pillared temple which, at first glance, seems of ordinary size, because no one part is exaggerated and there is no succession of stories to afford a measure.

DR. JULIUS L. SALINGER, of Philadelphia, a graduate of Jefferson College, 1886, later a teacher; died of angina pectoris March 24, 1912, while testifying in court. He was a neurologist of wide reputation. His untimely death, at the age of 46, cuts short a career that, for the average man would be an attainment but which for him, was but a promise.

DR. HENRY O. WALKER of Detroit, died April 5, 1912 of pneumonia, aged 68. He was educated in his native city, Detroit, and at Albion College and the University of Michigan. He graduated in medicine at the Bellevue Hospital Medical College in 1867. In 1869, he edited the Detroit Review of Medicine, now defunct. He was twice Vice-President of the A. M. A., and was a founder and President of the Mississippi Valley Medical Asso-

ciation. He was one of the pioneer surgeons of the modern school in the middle west and was particularly well known as a writer on Genito-Urinary subjects.

DR. OSCAR H. HALL of St. Paul, Minn., a graduate of the University of Buffalo, 1868, died April 2, 1912; after a lingering illness, aged 70. He was formerly President of the Minnesota State Homoeopathic Society and a member of the state examining board. He was a veteran of the Civil War.

DR. WILLIS M. WELLS, died at his home in Fulton, N. Y., March 30, 1912, aged 61. Death was due to cerebral haemorrhage. He was graduated at the University of Vermont, 1874. He had been President of the Oswego County Medical Society, of the Fulton Academy of Medicine and had held other offices of honor.

DR. EPHRAIM PEARSON JAMES of Galt, Ont., was found dead in his office, March 27, 1912. Death was supposed to be due to heart disease. He was 33 years old, a graduate of the University of Toronto, 1902. For four years, he served as ship surgeon on the Atlantic, before locating in Galt.

DR. JAMES IRVING RASBACH, of Ilion, died March 27, 1912, of cerebral haemorrhage, aged 59. He was a graduate of Bellevue Hospital Medical College, 1876. For 18 years, he had been a member of the local board of education.

DR. JOHN PHELPS SHUMWAY of Los Angeles, died March 17, 1912, aged 75. He was graduated at Albany Medical College, 1860 and had practiced at Geddes and Syracuse.

DR. JAMES H. STERNBERG of Waterloo, was found dead in bed, March 26, 1912, aged 78. He was a graduate of Jefferson, 1856.

DR. JOHN DAVID DAVIS of Springville, died March 26, 1912, aged 52. He was a graduate of the University of Buffalo, 1886. He had resided at Westfield before going to Springville.

So many elaborate biographies and eloquent tributes have been written to the memory of the late Clara Barton, that we need only mention the death of this venerable heroine of two wars, who has done so much to secure for the medical profession the skilled assistance of defter hands and more intuitive minds than belong to man. All honor to her memory.

DR. H. WARNER EGGLESTON of Binghamton, a graduate of the University of Vermont, 1895, died April 11, 1912.

DR. IRA ADELBERT HIX of Binghamton, a graduate of N. Y. University, 1883, died April 12, 1912.

SOCIETY MEETINGS

Medical Society of the County of Erie.

THE regular meeting of this Society was held Monday, April 22, 1912, in the Buffalo Library Building.

President Thomas H. McKee called the meeting to order at 8.30 p. m. Secretary F. C. Gram read the minutes of the regular meeting held February 19, 1912, and the minutes of the Council meetings held March 4th, March 9th and April 1, 1912, all of which were approved.

Dr. C. A. Wall, Chairman of the Committee on Membership recommended the re-instatement of Dr. Cora B. Lattin, who had resigned on removing from Erie County. He also recommended the election to membership of the following: Drs. Francis J. Lennon, Michael A. Conboy, Natalie K. Mankell, Frederick E. Sperry and James I. Kearney.

The secretary was directed to cast the vote of the society for each, and they were thereupon declared duly elected.

Dr. Wm. H. Thornton, Chairman of the Special Committee appointed for the purpose of devising means for the better collection of delinquent accounts, outlined the work thus far and, on his motion, the committee was authorized to expend a sum not to exceed twenty dollars (\$20.00) in promoting its work.

Dr. Thornton also reported for the delegates to the recent meeting of the State Society.

Dr. F. S. Crego called the attention of the Society to the State Law which prohibits the keeping of insane patients at Police Stations.

He, therefore, moved that the President appoint a committee of five for the purpose of conferring with the Health Commissioner and other proper authorities, with a view to establishing a suitable psychopathic ward in this city.

The motion was carried and the President appointed Drs. Crego, Matzinger, Sharp, Putnam and Nairn as such committee.

President McKee called attention to the system of cleaning street cars, by which conductors, on some lines, are compelled to sweep their cars at the end of the line instead of having them cleaned in the car barns. This creates a nuisance which the

passengers are compelled to suffer. On motion of Dr. Lytle, this matter was referred to the committee on Public Health.

Dr. Hartwig presented a patient, a Polish laborer about 40 years old, on whom violent spells of vomiting could be incited by pressure on a certain part on the side of his neck.

Following was the scientific program:

Malposition of the Uterus during the Puerperium.

Dr. F. C. Goldsborough.

Differential Diagnosis of Haematuria.

Dr. David C. Wheeler.

Preliminary Report on Conservation in the Treatment of Prostatic Hypertrophy.

Dr. Nelson W. Wilson.

Treatment of Compound Fractures.

Dr. Thew Wright.

Each paper was discussed, after which adjournment followed.

THE 106TH ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK, was held in Albany, Tuesday, April 16, to Thursday, April 18, 1912. As detailed reports will be published in the Society's Journal, only some general impressions of the meeting will be given. For the first time, the work was divided among sections, 1. Medicine, 2. Surgery, 3. Eye, Ear, Nose and Throat, 4. Mental and Nervous, including Eugenics and Expert Testimony, 5. Public Health and Preventive Medicine. In a sense, the division of the society is to be regretted but, with a registration of about 550, and with almost every man actually in attendance, the old idea of a single body is no longer practicable. Another innovation was the institution of entertainments for ladies, and the reception, dance and supper, at the Ten Eyck on Wednesday. With the exhibits of drugs, x-ray coils buzzing, and the free dispensing of grape juice, the general effect was of an A. M. A. meeting on a small scale.

Semi-popular lectures in the evening, in the Assembly Chamber drew regretably small audiences. The medical men, fatigued by long technical programs and inadequate ventilation were, for the most part inclined to rest and visit, rather than to attend lectures which would afford comparatively little new information, while, for some reason or other, the public did not respond enthusiastically to the invitation.

Joint sessions of sections, were held on Vertigo, Poliomyelitis, and Hyperthyroidea. Short symposiums were provided in the several sessions in addition to unrelated papers. In five half-

day sessions, from 28 to 39 papers were scheduled for each section, often with pre-arranged discussions. Comparatively few readers failed to appear and still fewer completed either paper or discussion in the time limit set. Most of the papers were full of meat, and several were illustrated with diagrams, stereopticon, etc. We can't refrain from urging that, at the next meeting, a desperate effort be made to have all rooms fairly well ventilated and, that, at the risk of hurting some one's feelings, much smaller programs be provided, to allow full discussion, and to prevent the encroachment of other, perhaps necessary and always desirable, private conferences, on the regular programs.

Except in the tendency to follow the precedent of the A. M. A., the change of the State Society from a permanent senate of the profession, to an ipso facto, general membership, is scarcely noticeable. To one who has attended many such meetings, there was conspicuous, as elsewhere, the gradual change in the personnel and appearance of the assemblage. At the same time, Albany was entertaining men who manufacture, sell, and use, big excavating and building machinery. A generation ago, even if one failed in an individual case, he could instantly have distinguished a little group of business men from one of physicians. Now, one had to look close and then be in doubt. The pompous professional dress and carriage have gone, the man who was prominent in the profession, not from technical knowledge but from self-assertiveness and local success, has vanished, the youth who puffed with the rudiments of a fresh science, disdained the practical physician, has grown up and his successors are more open minded. There were undoubtedly many country doctors at the meeting but the only man who would have passed as a type, we were assured lived in Manhattan. Altogether, it was an earnest, hard working, modest, but self-respecting lot of men conforming more and more closely to a common external type, but with plenty of individuality inside of their skulls.

THE Buffalo Civic League favored the citizens of that city with a stereopticon lecture on Smoke Abatement, April 16. Mr. J. M. Searle, Chief Smoke Inspector of Pittsburg, was the lecturer. Dr. Lucien Howe presided.

THE Buffalo Medical and Surgical League held its monthly meeting at the Hofbräu, April 11. Dr. Francis M. O'Gorman read a paper on brain tumors, exhibiting one weighing about 90 grams, successfully removed. Lunch was served.

THE Western New York Homeopathic Medical Society recently held a purely social meeting at the Hotel Statler, in Buffalo,

with vaudeville and a banquet, following a session of hard scientific work. Officers were elected as follows: Dr. H. W. Hoyt of Rochester, President; Dr. George R. Critchlow of Buffalo, Dr. B. D. Shed of Arcade, Vice-Presidents; Dr. R. Montfort Schley of Buffalo, Secretary-Treasurer.

THE American Gastro-enterological Association will hold its 16th annual meeting at Atlantic City, June 3 and 4.

THE Michigan Health Officers' Association will meet at Ann Arbor, May 22 and 23.

THE American Proctologic Society will hold its 14th annual meeting at Atlantic City, at the Hotel Chalfonte, June 3 and 4. Only one member is listed in the special territory of this journal: Dr. Dwight H. Murray of Syracuse, who will read a paper on Pruritus Ani.

THE American Academy of Medicine will meet at Atlantic City, Friday, May 31 to Sunday, June 2. Suicide in the Public Press, Hygiene in the Public Schools, Immigration Problems, Relation of Women to Modern Industrialism, Delinquent Girls, are some of the topics. Physicians interested in medical sociology, education, etc., and eligible by virtue of college degrees, are invited to become members.

THE MONROE COUNTY SANITARY ASSOCIATION held its regular quarterly meeting on Tuesday, April 16, and listened to a paper by Dr. W. S. Magill, of the State Hygienic Laboratory, on the "Production of Milk." There was a very large attendance.

THE BLACKWELL MEDICAL SOCIETY of Rochester, a society of women physicians held its monthly meeting Friday, April 19, at Iola Sanitarium. The last meeting of the season is on June 13 and is the occasion for holding the annual picnic. Dr. Mary A. Nickerson is the president.

THE ROCHESTER ACADEMY OF MEDICINE has discontinued its weekly meetings. The regular meeting of the society will be held probably May 8, although the council has power to change the date. The four sections meet Wednesday evenings as their officers determine. Dr. C. E. Darrow is president, and Dr. E. L. Hanes is secretary. The Academy is about to remove its library to new quarters just leased on the ground floor of 355 East

Avenue, near Alexander Street. The meeting in the future will therefore be held in the permanent home of the Academy.

THE ROCHESTER ACADEMY OF SCIENCE holds its last meeting of the season Monday May 3. This is to be an "experience meeting" and for exhibition of collections.

THE MEDICAL SOCIETY OF THE COUNTY OF MONROE will hold its annual all-day meeting on Tuesday, May 21st. Dr. S. W. Little will preside and Dr. A. C. Snell is secretary. An interesting program is being prepared.

THE HOSPITAL MEDICAL SOCIETY of Rochester holds its final meeting of the year on Thursday evening, April 25.

THE ROCHESTER PATHOLOGICAL SOCIETY continues its fortnightly meetings on Thursdays as follows:

May 2—Dr. E. A. French.

May 16—Dr. E. A. Shumway.

May 30—Dr. Wesley Mulligan.

June 15—"Annual Excursion and Picnic."

BOOKS AND AUTHORS

The Life and Work of William Pryor Letchworth, Student and Minister of Public Benevolence, by J. N. Larned of Buffalo, Author of "A Study of Greatness in Men," etc. With photogravure portrait and other illustrations. Crown 8vo, \$2.00 net. Postage 15 cents. Houghton Mifflin Company, 4 Park St., Boston, 16 E. 40th St., New York.



W. P. LETCHWORTH

Mr. Letchworth was of a type fortunately common in the old world and perhaps, fortunately rare in this country but admirable in itself—that of a gentleman of leisure, from the business standpoint, but devoting that leisure to the welfare of hu-

manity instead of self gratification. Born in 1823, his active business life ended in 1873, when Gov. Dix of "Shoot him on the Spot" fame, appointed him to the New York State Board of Charities. On this Board, he served till 1896, being President from 1877 to 1888. He labored especially in the interests of children, to secure their material care, to bring them back from lives of vice and crime, not merely by institutionalism but by educating and appealing to the humanity of the people at large. He also interested himself in the care of the insane and the epileptic and was indirectly and ultimately, the originator of the Craig Colony for Epileptics. In the work thus taken upon himself, he built up a considerable library of his own writings. He also did much to preserve the legends, history, mementoes and part of the favorite hunting ground of the Indians and in 1906 he deeded to the State a private park of over a thousand acres, including the three falls of the Genesee near Portage.

We take pleasure in reviewing his work at some length, not merely because of local interest in the man and local appreciation of his benevolences. His sociologic accomplishments, like the more tangible gift of scenic and historic value, represented something more than the kindly inclination and financial ability to do something for his fellows and for posterity. In both regards, he exercised judgment based on long experience and careful study. As medical men, we must recognize that this layman who would have been the last person to claim expert knowledge in medical art and science, was never-the-less, in the broad problems of the care of the epileptic and the insane, himself an expert. Not merely from the accident of wealth, and official position, but because of patient study, in Europe as well as at home, because of the advocacy of well matured ideas verbally and in his writings, he has made possible strictly medical advances in the care of these unfortunates.

Mr. Larnd, from a long experience in historic study and writing, has focussed his own talents on the life story of Mr. Letchworth, so as to produce a book of interest even to the casual reader.

Home Hygiene and Prevention of Disease, Norman E. Ditman, M. D., New York. Published by Duffield & Co., 1912. 333 pages. \$1.50 net.

This work is arranged alphabetically, for convenience of reference. It gives in plain language, a great deal of the symptomatology, prophylaxis and treatment, even allusions to pathology, of all of the common diseases, much sensible advice as to exercise, diet, sanitation, and even instructs somewhat in professional ethics and ideals. The style is not noticeably condensed

and it is only when one compares the scope with the size of the book, that one realizes that the author is a master of the art of brevity. The profession is somewhat prejudiced against popular medical books and especially against one that aims in any way to encourage domestic meddling with serious cases. But the physician who reads this book will find this prejudice oozing away. Not only is the author temperate in his statements and possessed of common sense, but, throughout the book he aims to train the lay reader to look at medical matters from the viewpoint of the conscientious physician and to train him—or her—not to take rash chances and to interfere, but to be intelligent and helpful.

Surgical Operations, a hand-book for Students and Practitioners, by Prof. Pels-Leuden, Berlin. Only authorized English translation by Dr. Faxton E. Gardner, of New York. Published by the Rebman Co., New York, 1912. 757 pages, 538 illustrations, cloth, \$7.00.

The work, both in its execution and in the temperament of the author, is essentially practical, thus conforming rather to American than to German standards. Naturally, in many details, the reader will differ from the opinions expressed. In such cases, it is worth remembering that the author himself is abundantly justified in expressing his own opinion, and that, in various moot points, he follows—or rather agrees with—Billroth, Krause, Sauerbruch and Bauer. The Publishers are to be complimented on their part of the work. One detail we think worth mentioning. This book is about two-third the thickness and has about two-thirds of the weight of the average, glossy paper book.

Operative Obstetrics, including the **Surgery of the Newborn**, by Edward P. Davis, M.D., Professor of Obstetrics, Jefferson Medical College, Philadelphia. Octavo volume of 483 pages, with 264 illustrations. Philadelphia and London, W. B. Saunders Company, 1911. Cloth, \$5.50 net.

This work includes operations during pregnancy, not only such as depend directly upon pregnancy, as ectopic gestation, therapeutic abortion, etc., but removal of the appendix, of diseased tubes, etc. It illustrates and treats fully, the mechanics of normal and abnormal labor, and mechanic, non-vulnerative operations such as version, application of forceps, etc. Of especial interest are the illustrations of maternal deformity leading to Caesarian section and of X-ray methods of determining or excluding foetal fractures, etc. At the end of each chapter is given a bibliography, largely from European sources. Regarding certain topics of especial rarity or interest, one would wish a more complete bibliography for historic purposes yet such compilations

are probably better left for special articles than included in text books.

A Manual of Pathology, by **Guthrie McConnell**, M. D., Professor of Pathology and Bacteriology, Temple University, Medical Dept., Philadelphia. Second Revised Edition. 12mo of 531 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1911. Flexible leather, \$2.50 net.

This is an excellent, condensed treatise, convenient as a pocket companion for students but is by no means without value for the practitioner. We would suggest to the physician of ten or more years' practice, who has become somewhat rusty on pathology, that he read through this little work, which is well systematized and does not contain a mass of detail. Not only will his recollections be refreshed and corrected, but he will be surprised to find that, every now and then, light will be thrown on a puzzling clinical case, with very practical results.

Clinical Diagnosis, a Manual of Laboratory Methods, by **James Campbell Todd**, MD., Professor of Pathology, University of Colorado. Second edition, revised and enlarged. 12mo of 469 pages with 164 text-illustrations and 13 colored plates. Philadelphia and London, W. B. Saunders Company, 1912. Cloth \$2.25 net.

The book begins with a chapter on the use of the microscope.

Sputum, urine, stomach contents, blood, faeces, are discussed systematically, with what impresses the reviewer as a fair balance of chemic and microscopic methods and due regard for the needs and limitations of the practitioner. Various miscellaneous examinations, as of pus, semen, etc., technic of investigations for animal parasites and bacteria, preparation of vaccines, etc., are added.

Transaction of the 17th Annual Meeting of the American Laryngologic (al) Rhinologic (al) and Otologic (al) Society, held at Atlantic City, June 1-3, 1911. Including meetings for the current year of the Eastern, Middle, Southern and Western sections.

We cannot attempt to review the large number of papers, covering, for the most part in symposiums, a wide range of subjects. Last month, we reviewed the Proceedings of the 33d meeting of the American Laryngologic (al) Association, held in Philadelphia in May, 1911. We know nothing of the organization of these two bodies, excepting as the work of each shows a high order of merit; we take no sides in a controversy if, indeed, there be one; but we cannot refrain from expressing the conviction that greater economy of time, money and effort and greater efficiency would result from a union of such special interests as are here represented.

Modern Urinology. A System of Urine Analysis and Diagnosis. Illustrated, by **Clifford Mitchell**, A. B., M.D., Professor of Chemistry, Clinical Urinology and Renal Diseases, Hahnemann Medical College, Chicago, Ill. 636 pages. Cloth, \$3.00 net. Postage, 27 cents. Philadelphia, Boericke & Tafel, 1912.

This work impresses us as one of the clearest, most practical and yet most scientific that have been published. The alphabetic index of tests, following the table of contents, the list of topics at the beginning of each chapter, the assembling of information as under the color of the urine, "where the blood comes from," etc., the critical statements of advantage and disadvantages of different methods, greatly facilitate reference. Therapeutic hints, medico-legal considerations and various other practical deductions are interpolated. For instance, under the head of chlorids, we are informed that malingering in regard to the claim of starvation may be detected by the amount of chlorids, which are retained as soon as food is withdrawn.

E. Merck's Annual Report of Recent Advances in Pharmaceutic (al) Chemistry and Therapeutics, Vol. 24, Darmstadt, July 1911.

This work is in idiomatic English and is well worth the physician's attention. For instance, few of us realize that there are 11 available compounds of cacodylic acid and that this substance is to be seriously considered as a rival of salvarsan. The value of kaolin, internally, has been somewhat of a hobby with the editor but many will be surprised to learn that this old-fashioned remedy deserves attention. The distinction between fluorescin and fluorescein, and the preparation of the former from the latter and reversion by oxidases, as haemoglobin, as a test, make interesting reading. There is one practical point suggested by the issue of such reports and circulars, from foreign cities to American physicians, even when the firms have American branches. Ask your postmaster why. And, when you have found out, take up the matter with your representative.

Thirty-eighth Annual Report of the Secretary of the State Board of Health, Dr. Frank W. Shumway, Lansing, Mich., 1911.

The problem of disposing of the sewage of the beet sugar plants and the statistics of small-pox, including the direction of spread of infection, are among the most interesting portions of the work. We would advise writers on the sugar industry, economics in which sugar plays an important role, sewage and vaccination, to consult this report. Health officials will, of course, receive copies.

Money in Goats, by **W. Sheldon Bull** of Buffalo, published by the Wakefield Press, Buffalo, 24 pages, illustrated, paper covers, 25 cents.

Physicians who have lost cases of tuberculosis when the availability of milk from an immune animal might have afforded a chance of saving life, and those who have wished in vain for the high fat content of goat's milk for certain cases of infant feeding, will be interested in the effort of Mr. Bull to popularize the goat industry. We are apt to think of the goat as an animal of minor importance. Yet this country imports thirty million dollars' worth of skins, each year, in spite of an already appreciable and constantly increasing local industry. In 1910, 115,811 goats were slaughtered in the United States for food, 226 being condemned but, of a total of over 283,000 killed in the four years, 1907-10, none were condemned for tuberculosis. Whether the natural immunity of the goat has any active value as a prophylactic or a curative agent, is subjudice. At any rate, goat's milk is a valuable commodity and the industry opens a field of employment to many persons of limited capital and strength. The mere fact that the goat is small, and cheap as compared with the cow and that the excrement is much less bulky and objectionable, renders it possible to have a supply of fresh milk in places where it would be impossible to keep a cow. And, what is important, the milk is agreeable to the palate.

A Handbook of Practical Treatment, in three volumes, by 82 eminent specialists. Edited by **John H. Musser**, M.D., Professor of Clinical Medicine, University of Pennsylvania; and **A. O. J. Kelly**, M.D., late Assistant Professor of Medicine, University of Pennsylvania. Volume III; Octavo of 1,905 pages, illustrated. Philadelphia and London, W. B. Saunders Company, 1912. Per volume: Cloth, \$6.00 net; half morocco, \$7.50 net.

The larger and the wider the scope, the more difficult does it become to do justice to a book. The present volume deals with constitutional, digestive, urinary, nervous, muscular and mental diseases. Like the others in the series, it enters into details, reviews long established as well as more or less novel therapeutic procedures and while necessarily reflecting the personal views of the writers, aims to do full justice to all reasonable opinions as to therapy. If we may be pardoned for a minor criticism, we don't quite like that expression "By 82 eminent specialists." It reminds us too strongly of claims of therapeutic ability that we see in the daily press. A considerable number of the writers are not specialists at all in the accepted professional sense and they are all too eminent to wish to have the term applied.

Annual Report of the Surgeon-General of the Public Health and Marine Hospital Service of the U. S., for the year 1911.

While this is largely a business report, scientific work being alluded to only statistically, there are many points of extreme interest. A beginning has been made on the investigation of the water of the Great Lakes which, it is estimated, will be depended on by a quarter of the population of the country, within a few years. Small-pox, anti-typhoid vaccination, pellagra, cholera, epidemic meningitis, are among the big problems of this service, in addition to the routine care of revenue and merchant marine sailors. Curiously enough this service has only 135 commissioned officers and employs 283 acting assistant surgeons. It would seem—but no, let us attend to our own business and not try to offer advice without full understanding of the conditions.

Battle & Co. have just issued No. 8 of the Dislocation Charts which completes the set. They will be sent free to Physicians on request. Also Fracture and Tumor charts if desired.

MISCELLANY

Most of us have seen articles on the trade relations between Germany and the U. S., on account of potash, but few have realized that potassium is necessary in agriculture, beyond the minute amount normally present in the soil. Thus far, no considerable deposits of potash have been found in the U. S. except under such circumstances of dilution and presence of other materials as to make the cost of production prohibitive. Sea water contains about 10 ounces to the ton but the cost of separation would again be prohibitive. However, there has been discovered a natural means of condensation, in a gigantic sea weed which grows at a depth of 60 to 100 feet, abundantly along the Pacific coast. When air-dried, this yields 25 per cent. of potash salts and also 3 pounds of iodine per ton. The present problem therefore, is to devise some form of submarine harvesting machinery. (Abstract from Current Literature, February, 1912.)

CONSUMPTION OF SUGAR IN THE U. S. Last year, the continental U. S. consumed 7 billion, 670 million pounds of sugar, 81.75 pounds per capita, the maximum yet reached, being an increase from 72 pounds in 1901 and from 36.5 pounds in 1871. Some years ago, we found that the average consumption for about 40-dwellers in a residence hotel, was about 130 grams per capita per diem (less waste but plus an unknown and probably considerable quantity taken in the form of candy, soft drinks.

extra meals, etc.), corresponding approximately to 100 pounds a year. From personal and observed experience, the conclusion was drawn that certain persons may take as much as 200 grams a day, corresponding to about 160 pounds a year, but this includes the natural sugar of fruit, etc. For the country as a whole, 100 pounds per capita per year, may be regarded as the ultimate maximum.

Saccharose, as is well known, is a double hexose derived from the maple, cane and beet. Originally—or rather aboriginally—the first was the chief source of sugar for what is now the northern states and it continued to be within the recollection of persons still living. Then, for many years, the sugar cane was almost the only commercial source. With the development of the beet sugar industry, this last now furnishes about 2-3 of the domestic sugar.

In view of the recent agitation concerning the cost of living, it is interesting to note that the wholesale value of sugar is estimated at about 3 cents a pound and that \$90 million worth of the sugar in 1911 came from foreign countries, \$78 million worth from "possessions" and \$90 million worth was raised in the states. A duty of \$50 million was paid on imported sugar. It is not the province of a medical journal to enter the field of politics or even of political economy but in view of the paramount importance of maintaining a low standard of retail cost for food, the demonstration that sugar can be marketed at an ultimate price of 5 cents and that it has suddenly gone up to 6 or even 7 cents, apparently quite arbitrarily, there is a pretty obvious moral to be drawn.

Obstetrical Charts in colors, sent on receipt of 25c, postage paid. Ready for delivery June 1st. Battle & Co., St. Louis

Don't take them too seriously.

Mrs. FISKE, in her recent play entitled *Mrs. Bumpstead-Leigh*, depicts the social ambition of the family of a patent medicine man. Whether we are to consider this as a play "with a purpose" or not, the fact remains that the essential vulgarity, ignorance and deception of the old style quack is impressed upon the audience during the comedy, in such a way as to educate more thoroughly than could be done by a campaign of serious literature and popular lectures.

Some of the strongest organizations of charlatans have been welded by the blows of denunciation whereas, if ignored or treated with not too contemptuous ridicule, they would have remained a heap of scraps that would have rusted out in a few years.

There is, in almost every phase of human activity, a minority that exists simply for the sake of being a minority; a cause that loves martyrdom more than what it nominally stands for: an under dog that turns its belly upward as naturally as does a dead fish. And there are men, not wise enough to occupy a high place in any sincere activity but shrewd enough to thrive by exploiting the fraternalism of a persecuted tenet.

Do you remember the old fashioned, picturesque, red shirted and helmeted volunteer firemen? Do you remember, as a little boy, being puzzled at the paradox of the double line pulling, by a white cord, the gaily painted hose cart, while two men at the pole of the cart resisted their efforts? And do you remember the kind grown up who explained that that little minority was what kept the cord from getting dirty and held the majority in even line? Don't worry about the men who are dragging against your professional efforts, as long as you are pulling the cart ahead. Let them alone, they are fulfilling a useful function. If you get out of line and drop the rope to kick off or to induce them to pull with you, you will spoil the whole procession.

CONVALESCENCE FROM THE EXANTHEMATA.—The first two or three months of the year are usually characterized, in the experience of the family physician, by the occurrence in his practice, of a crop of cases of the contagious diseases of children, especially scarlet fever, measles, German measles, etc. This is accounted for by the readiness with which contagion is spread in the schools, when ventilation of the school room is the least perfect and the closer housing of school children during school hours favors the distribution of communicable diseases. As the diseases in question are self-limited in nature, expectant and symptomatic treatment, together with precautions as to isolation, etc., is about all the physician is called upon to direct. It is well known, however, that in all but the mildest cases, the adolescent subject of scarlatina, or measles, is usually more or less debilitated or devitalized, when convalescence is established. Special care should be taken to avoid the administration of any tonic or reconstituent which is likely to disturb the child's digestion or, by inducing constipation, to minimize the appetite or desire for food.

Pepto-Mangan (Gude) is the ideal reconstructive tonic for these young patients, because it is pleasant to the taste, easily tolerable by the stomach and readily assimilable by blood and tissue and promptly efficient in restoring appetite, strength, color and general well-being.

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ORIGINAL COMMUNICATIONS

The Duties of Physicians in Regard to Insanity.

By FRANCIS E. FRONCZAK, M. D., Health Commissioner,
Buffalo, N. Y.

OUT of 200 or more sections with innumerable amendments, relative to the law on insanity, the following are the portions of the law which will be of general interest to physicians, in relation to the Health Department:

Any reputable physician, a graduate of an incorporated Medical College who has been in the active practice of his profession at least three years may become an examiner by filing with the State Commission at Albany a certified copy of the certificate of a judge of a court of record showing such qualifications in accordance with forms prescribed by the State Commission in Lunacy.

Duties of local officers in regard to their insane. All county superintendents of the poor, overseers of the poor and other city, town or county authorities, having duties to perform relating to the *insane poor* are charged with the duty of seeing that all *poor* and *indigent* insane persons within their respective municipalities are timely granted the necessary relief conferred by this chapter. The poor officers or authorities above specified shall notify the Health Officer of the city of any *poor* or *indigent* insane or apparently insane person within such municipality whom they know to be in need of relief conferred by this chapter. When so notified or when otherwise informed of such fact, the Health Officer shall see that proceedings are taken for the determination of his mental condition, and for his commitment to a state hospital. When notified or informed of any *poor* or *indigent* insane, or apparently insane person in need of relief conferred by this chapter, the Health Officer shall provide for the proper *care, treatment* and *nursing* of such person pending the determination of his mental condition and his commitment.

Sec. 80. Order for commitment of an insane person. A person alleged to be insane, and who is not in confinement on a criminal charge, may be committed to and confined in an institution for the custody and treatment of the insane, upon an

order made by a judge of a court of record of the city or county, or a justice of the supreme court of the judicial district, in which the alleged insane person resides or may be, adjudging such person to be insane, upon a certificate of lunacy, made by two qualified medical examiners in lunacy, accompanied by a verified petition therefor, or upon such certificate and petition, and after a hearing to determine such question, as provided in this article. The commission shall prescribe and furnish blanks for such certificates and petitions, which shall be made only upon such blanks. An insane person shall be committed to a state hospital, a duly licensed institution for the insane, or the Matteawan State hospital, or to the care and custody of a relative or committee, as hereinafter provided. No idiot shall be committed to or confined in a state hospital. But any epileptic or feeble-minded person becoming insane may be committed as an insane person to a state hospital for custody and treatment therein.

Sec. 81. Physicians shall jointly make a final examination of the person alleged to be insane within ten days next before the granting of the order. The date of the certificate of lunacy shall be the date of such joint examination. Such certificate of lunacy shall be in the form prescribed by the commission, and shall contain the facts and circumstances upon which the judgment of the physician is based and show that the condition of the person examined is such as to require care and treatment in an institution for the care, custody and treatment of the insane.

Neither of such physicians shall be a relative of the person applying for the order or of the person alleged to be insane, or a manager, superintendent, proprietor, officer, stockholder, or have any pecuniary interest, directly or indirectly, or be an attending physician in the institution to which it is proposed to commit such person.

Sec. 82. Proceedings to determine the question of insanity. Any person with whom an alleged insane person may reside or at whose house he may be, or the father or mother, husband or wife, brother or sister, or the child of any such person, and any overseer of the poor of the town, and superintendent of the poor of the county in which any such person may be, may apply for such order, by presenting a verified petition containing a statement of the facts, upon which the allegation of insanity is based, and because of which the application for the order is made. Such petition shall be accompanied by the certificates of lunacy of the medical examiners, as prescribed in the preceding section. Notice of such application shall be served personally, at least one day before making such application, upon the person alleged to be insane, and if made by an overseer or superintendent of the poor,

also upon the husband or wife, father or mother or next of kin of such alleged insane person, if there be any such known to be residing within the county, and if not, upon the person with whom such alleged insane person may reside, or at whose house he may be. The judge to whom the application is to be made may dispense with such personal service, or may direct substituted service to be made upon some person to be designated by him. He shall state in a certificate to be attached to the petition his reason for dispensing with personal service of such notice and if substituted service is directed, the name of the person to be served therewith.

The judge to whom such application is made may, if no demand is made for a hearing in behalf of the alleged insane person, proceed forthwith to determine the question of insanity, and if satisfied that the alleged insane person is insane, may immediately issue an order for the commitment of such person to an institution for the custody and treatment of the insane. If, however, it appears that such insane person is harmless and his relatives or a committee of his person are willing and able to properly care for him, at some place other than such institution, upon their written consent, the judge may order that he be placed in the care and custody of such relatives or such committee. Such judge may, in his discretion, require other proofs in addition to the petition and certificate of the medical examiners.

Sec. 84. Costs of commitment. The costs necessarily incurred in determining the question of the insanity of a poor or indigent person and in securing his admission into a state hospital, and the expense of providing proper clothing for such person, in accordance with the rules and regulations adopted by the commission, shall be a charge upon the town, city or county securing the commitment. Such costs shall include the fees allowed by the judge or justice ordering the commitment to the medical examiners. If the person sought to be committed is not a poor or indigent person, the costs of the proceedings to determine his insanity and to secure his commitment, as provided in this article, shall be a charge upon his estate, or shall be paid by the persons legally liable for his maintenance. If in such proceedings, the alleged insane person is determined not to be insane, the judge or justice may, in his discretion, charge the costs of the proceedings to the person making the application for an order of commitment, and judgment may be entered for the amount thereof and enforced by execution against such person.

LAW RELATIVE TO EMERGENCY CASES.

Notwithstanding the requirements of the law that an alleged insane person be duly committed by an order of the court, in a

case where the condition of such person is such that it would be for his benefit to receive immediate care and treatment, or if he is dangerously insane so as to render it necessary for public safety that he be immediately confined, he shall be forthwith received by a state institution authorized by law to care for the insane. In such case such insane person shall be so received by such institution, and upon a petition made by the person authorized by this section to apply to a court for an order of commitment. By virtue of such certificate of lunacy and such petition such insane person may be retained in such institution for a period not to exceed five days. Prior to the expiration of such time an order for his commitment must be obtained in the manner provided by this section. The certificate of lunacy executed by such physicians must contain adequate reasons why the insane person should be immediately received in an institution for the insane for treatment. The superintendent or person in charge of any such institution may refuse to receive such insane person upon such certificate and petition, if in his judgment the reasons stated in the certificate are not sufficient, or the condition of the patient is not of such character, as to make it necessary that the patient should receive immediate treatment.

LAW RELATIVE TO VOLUNTARY PATIENTS.

The superintendent in charge of any state hospital for the insane (except Matteawan or Dannemora) may receive and retain therein any person suitable for care and treatment and who voluntarily makes written application therefor and whose mental condition is such as to render him competent to make such application. Such patient must give five (5) days notice in writing to the Superintendent before leaving the hospital.

An Unusual Case of Injury of Thorax.

GEORGE FOY, M. D., F. R. C.

Fellow of the Royal Society of Medicine, London.

Dublin

THE BUFFALO MEDICAL JOURNAL for October, 1895, opens with a very interesting article on "Bruises of the Lung" by Dr. John Parmenter. He deals with cases in which the thoracic walls remain intact; "that is to say, no wound of the thoracic walls together with fracture or dislocation of the ribs; cases, therefore, in which there is no open communication between the point of impact of the acting force and the lesion in the lung."

The article is of value in that it drew attention, like Sir Thomas Browne's "Pandoria" to a popular error, to wit: that weighty bodies cannot pass over the thoracic walls without fracturing the osseous walls of the cavity, and showed that laceration

of lung tissue may result without injury to the chest walls. There are some sixteen or seventeen such cases recorded. The majority of the injured were, as might be inferred, children; the youngest of which was that reported by Dr. Wicks, Guy's Hospital Reports for 1860, of a child seven years old, and the eldest a man forty years. To these cases I would add the following one which is remarkable in that neither the thoracic walls nor the thoracic viscera were injured. My patient, a healthy, chubby, strong boy, 10 years old, was on December 21, 1911, crossing one of our city streets when a passing dray cart knocked him down. The boy fell on his face, losing two front teeth from the fall, and the left wheel of the dray passed over the thorax, leaving a broad bruised line from left to right across the scapula. Three men, the boy's father and two laborers, were present at the time of the accident and one of them lifted the lad from the ground. The boy was terribly frightened, unconscious, and bleeding from his mouth. When first examined the case looked very serious; but it was soon found that the bleeding was due to the knocking out of the teeth, and as the boy gradually recovered consciousness and had no fracture, emphysema, nor any evidence of concussion, he was sent home from hospital; where he came under the care of the family medical attendant. He very naturally concluded that the wheel of the dray, which weighed $6\frac{1}{2}$ cwt., could not have passed over the child's chest; but the broad bruised mark on the back of the thorax and the torn clothes ultimately convinced him that the witnesses to the accident were correct when they said "the dray wheel went over the child's body as he lay on his face on the ground."

I may add that the dray was on good springs and the driver was sitting on the shaft of the dray on the side opposite to that under which the child fell. Thirty-four days after the accident a careful physical examination could find no trace of any injury and the boy returned to school, where he shows no trace of cerebral injury for he retains his position as head of his class. I may add that the accident gave rise to a law-suit in which the facts as stated above were proved in Court.

Traumatic Finger Amputations.

ALFRED H. NOEHREN, M. D.

Buffalo, N. Y.

THIS paper is based on a series of 55 traumatic finger amputations in 35 different patients which came under the care of the writer from January 1, 1909 to March 1, 1912. All were the result of industrial accidents, the majority of the pati-

* Read before the Buffalo Medical and Surgical League, May 9, 1912.

ents having had their fingers caught in stamping machines powerful enough to go through a steel plate, cutting off the fingers with little injury to the remainder of the hand. The rest were due to crushing injuries, tearing the skin in all directions, grinding up the tendons and muscles and fracturing or crushing the bones. Most of the men had their hands covered with oil, soot, and dust, or wore dirty gloves at the time of the injury and these were ground into the wound.

The cases in which one or two fingers only were involved were treated under local anesthesia in the office. The remainder were taken to the Deaconess Hospital and a general anesthetic administered. In one case three fingers were amputated in the office, but it was decided at the time that the pain and ordeal were greater than could reasonably be asked and since then two fingers have been the limit for local anesthesia in the office, other things being equal.

In three cases, secondary amputations had to be done, because treated too conservatively at first. In the one, the middle finger was crushed and an attempt made to save the finger, but gangrene developed and necessitated amputation at the metacarpo-phalangeal joint. In the second case it was attempted to save a crushed distal phalanx, but nine days later it had to be amputated on account of sloughing and gangrene. In the third case, enough of the phalanx had not been removed to allow the soft parts to cover the bone. About one-quarter inch was later removed and the finger promptly healed up. In a fourth case the patient would not consent to the removal of any bone, because it did not project beyond the soft parts, but returned in three weeks and asked that it be done. By this time the soft parts had retracted, leaving a tender stump of bone projecting.

In treating these cases in the office, it has been the writer's aim to develop a method and technique that would as far as possible satisfy the following conditions: 1. simplicity, 2. minimum of pain and shock to patient, 3. preservation of as much useful stump as possible, 4. minimum time for healing and disability of patient.

After trying various methods, the following has given the greatest satisfaction.

PREPARATION OF PATIENT.

1. Tying of rubber catheter around base of finger, or, if necessary, an Esmark bandage around the wrist, to control hemorrhage and increase the action of the local anesthetic.
2. Cleansing of skin surrounding wound with turpentine.
3. Cleansing of wound by pouring hydrogen peroxide over it rather liberally a few times.

4. Drying of wound and surrounding skin with ether.
5. Painting of wound and skin with Tincture of Iodine. While the iodine is acting, the instruments may be boiled and the hands of the operator scrubbed up and immersed a few minutes in bichloride of mercury.
6. Protection of wound by cutting slit in piece of sterile gauze, slipping it over the stump, and covering rest of hand with sterile gauze.

OPERATION.

1. Injection of syringe-ful of Quinine and Urea Hydrochloride into the wound, especially into that part of the skin where an incision is to be made and close to and around the bone, where the chief dissection takes place. Some time must be given for this to act.

2. Dissection of as much bone as is necessary to allow covering of the remainder by the soft parts. Unless the skin is already torn, this is best accomplished by making a lateral incision on one or both sides directly down to the bone, thus making an anterior and posterior flap. In dissecting, the bone is hugged closely and either the scalpel or scissors used. In this way, infection and destruction of the soft parts are reduced to a minimum. After freeing enough bone, usually about one-quarter inch from the extremity of the soft parts, the periosteum is scraped back and all the tissues held out of the way with a thumb forceps.

3. Removal of bone with the bone-forceps and trimming of edges with bone-forceps and scissors. This seldom causes the least pain.

If the injury is just distal to a joint, it is better to amputate at the joint, except in the case of the proximal phalanx, where even the shortest stump is of great value. In amputating at an interphalangeal joint, dissection is done along the dorsum of the bone to the joint, the joint is forcibly flexed, the capsule punctured with the scalpel, and the anterior surface of the bone dissected from the joint outward.

4. Covering of bone stump with two to four through-and-through silkworm-gut sutures, including the flexor and extensor tendons, subcutaneous tissue, and skin. The periosteum or joint capsule may also be included, if possible, but whether or not this was done seemed to make little difference in the results.

5. Insertion of small gauze drain down to the bone. If there is sufficient gaping between the stitches, this is not necessary.

6. Covernig of wound with a tight temporary gauze dressing to control hemorrhage and removal of tourniquet. After about five minutes, this dressing is removed, hydrogen peroxide once more poured over the wound, and a dry gauze dressing rather snugly applied. A slight oozing may be disregarded. The patient should be instructed not to remove the dressing, but to cover it with a clean cloth, if blood comes through.

It will be noted that in this operation no catgut is used and the tissues are not sutured in layers, periosteum, tendons, and skin, but by through-and-through silkworm-gut sutures. These are boiled with the instruments, are easily handled, and later easily removed. This prevents infection and makes the operation much shorter and simpler. Formerly the writer carefully sewed the periosteum or joint-capsule and the tendons with catgut, but found the results better with the simpler and easier way. The same is true of tying off blood-vessels. A great deal of time may be used and much damage to tissues done in looking for blood-vessels and in tying them more catgut is buried in the wound, thus increasing still more the chance of infection, while the method described above controlled the hemorrhage in every case done in the office.

All, this, however, does not hold good in the more extensive injuries to the hand operated upon under general anesthesia in a hospital with plenty of assistance or even in amputation of a finger for other reasons than for injury to a dirty hand in a dusty shop.

AFTER-TREATMENT.

The patients are instructed to return in two days. If there should be much pain, they are to return the following day. The dressing is then loosened by immersing it in dilute hydrogen peroxide and removed. The drain, if present, is also removed. If the wound looks good, a small amount of antiseptic powder is dusted on the wound and another gauze dressing applied. If the wound looks inflamed, a moist 1-5,000 bichloride dressing is put on and the patient instructed to keep it moist. The stitches are removed on the fourth or fifth day.

RESULTS.

Complete healing in these office cases usually took place in ten days. Some were healed in one week and some required two weeks. Several patients returned to work the next day and most of them in the course of a week. No case of painful scar or nerve-ending was seen, although the patients were asked to return, if any trouble developed. The motion of the stump was good in every case, as was also the cosmetic result.

Lest it be inferred that not sufficient conservatism was practiced in these cases, the writer wishes to state that during this same period, five cases of compound fracture of a phalanx were treated conservatively with splint and sewing of lacerated soft parts with good results. On the other hand, to be too anxious to save a finger that in the end may be stiff and useless or may have to be amputated anyway with a long period of disability, is not always doing a working-man the most good.

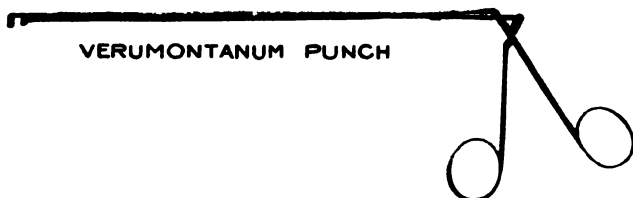
The more extensive cases operated at the hospital will not be described, as it is the purpose of this paper rather to present a few practical points learned from the treatment of the kind of finger injury that is liable to present itself in the office of every practicing physician.

519 E. UTICA STREET.

Inflammation of the Verumontanum and Posterior Urethra with Presentation of an Instrument.

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MORE attention has been paid in recent years than formerly to the pathological conditions found in the posterior urethra. This increased interest has been brought about primarily by the improvement in instruments and technic and the urethra is now examined and treated with the same accuracy as the nose and throat. One of the interesting and important parts of the posterior urethra is the verumontanum, which, before the introduction of the improved instruments, apparently had been overlooked. The anatomies do not agree upon the location or size of the verumontanum and the descriptions are most hazy. It contains, as you know, the openings of the ejaculatory ducts and arises from the floor of the posterior urethra not unlike a nose, but as no two noses are alike so no two normal verumontani are the same. My attention was first called to the importance of this organ by Dr. Young, who was achieving such satisfactory results in certain classes of cases in so short a time that

his success seemed hardly possible when one considered the length of time we had worked over similar cases, often with but little improvement.

To Swinburne should be given the credit of recognizing the importance of this organ and the endoscope which bears his name, has been of great aid in its treatment. The organ is of much more importance than has been realized. It is richly endowed with nerves and can give rise to motor and sensory symptoms of both the genital and urinary tract. The verumontanum is best seen, I believe, through the Swinburne tube. After passing the tube completely into the bladder and withdrawing it slowly half an inch or so, the organ appears in the window. An aspirator will aid in withdrawing the small amount of urine that may obscure the view. I think the Swinburne tube with a light near the window gives not only the best view but also is much more comfortable for the patient during its insertion. Dr. Young prefers a straight tube or Swinburne tube with reflected light because he has more room to work in the endoscope. However, I have not been able to get as clear a view with tubes having reflected light as with those having the light in the tube, and my patients have complained of more pain during the introduction of the straight tubes than with the use of the Swinburne tube.

Inflammation of this organ is usually caused by old gonorrhea although many cases give no venereal history. It may be associated with oxaluria, non-specific prostatitis and vesiculitis. In appearance the normal verumontanum is slightly darker red than the surrounding urethral membrane. The pathological appearance varies greatly. It is usually found congested and hyperemic and bleeds on touch. It looks not unlike the wattles of a turkey. Many times there is a real hypertrophy. It may bulge on either side of the urethra and in some instances seems almost to fill it. An ulcer is often found upon the surface. Many of the symptoms complained of cannot be differentiated from inflammation of the prostate and vesicles, as has been shown by Hawkins.

When we consider that nine out of ten cases of anterior gonorrhea become posterior and that in almost the same ratio the prostate and seminal vesicles become infected, it can easily be seen why the verumontanum is also included in the inflammatory area. The wonder is how it escapes. After careful and diligent treatment of the prostate and vesicles by massage, it seems impossible often to completely clear up the urine. There will still remain a few shreds and pus cells. In the past we were taught to pass sounds and make deep instillations of 1 or 2 per

cent. nitrate of silver. This treatment was effective sometimes but often apparently useless. We were not hitting the nail on the head but were applying a solution over an inch or more of the urethra when an eighth only was affected. The patient may give a history of burning sensation during urination or of sharp pains in the perineum. Frequent desire to urinate with tenesmus may exist and a few drops of blood may follow micturition. The pain is oftentimes referred to the rectum, hypogastrium or shoots down the legs. As in other conditions in the posterior urethra the pain frequently is complained of in the glans. Swinburne states that these pains generally are independent of the act of urination or may come at the end of urination. A neurotic condition is usually present. The irritation has caused nocturnal emissions and some patients complain of diurnal. Premature or delayed ejaculations and almost complete impotence are found. This condition is the cause of neurasthenia in a great many cases which cause is often overlooked. Because the patient gives no history referable to the genitourinary tract and his urine upon examination does not disclose much of anything, that part of his anatomy is excluded.

In illustration of some of the phases of these conditions I would like to cite a few cases.

L. M. referred by Dr. G. F. Reusch, April 13, 1909; age 22, telegraph operator. No venereal history, complains of pain over pubes, lumbar backache lasting four years; was operated on two years previous for varicocele, no improvement. Urine negative, verumontanum hypertrophied and congested. Touched with Ag. No. 3 stick; April 24, curretted; April 29 and May 4, treated; May 11, much improved; June 15, has had no pain over pubes or backache since last visit; July 15, has had no trouble since last visit; cured.

E. L. first seen January 7, 1907; street car conductor; age 31; gives history of five attacks of gonorrhea since he was fifteen years old. For past three years has noticed morning drop, smarting in posterior urethra and frequent urination and pain over pubes. Examination showed boggy prostate and engorged vesicles. Patient is marked neurasthenic. He was massaged, treated with instillation of nitrate silver, dilated for four months but the burning sensation and morning drop though improved still persisted; no gonococci present. I did not see patient again until June 23, 1909; he stated he had been under care of a number of physicians during the two years interval; still complained of smarting sensation at time of urination, pain over pubes; this is not affected by the quantity of urine in bladder. Examination showed verumontanum hypertrophied and congested, bleeds on

touch. Amputated and touched with stick nitrate. June 28, has not noticed pain until this A. M.; August 9, has had four treatments since June 28, does not have pain but rarely; August 28, no pain since last visit; October 2, no pain since August.

Dr. J. D. referred by Dr. Stockton, October 20, 1909; age 41; neurotic. History of gonorrhea at 23 lasting for long time; had either exacerbation or new attack at thirty-three lasting four weeks; complains of pain in perineum and in left hypogastric region. Examination showed right seminal vesicle tender, verumontanum congested. Treated October 20, 28 and November 4. Cured.

F. W. V. referred by Dr. Walter A. Scott, of Niagara Falls, August 6, 1909; age 25, street car conductor; had gonorrhoea in 1906, lasting two years. During March began to have frequent painful urination; this continued and he was compelled to quit work the latter part of June. When I saw him with Dr. Scott on August 6, he could not hold his urine over an hour. Examination showed highly congested and hypertrophied verumontanum; was sent to bed for one week. Verumontanum treated August 11, 16 and 30; cured. Capacity 18 ounces, urinates about every four hours, does not get up at night.

P. D. referred by Dr. Charles Walrath, Ellicottville; age 58, farmer. Began to have pain at neck of bladder ten years ago; at first only noticed it when at rest, later it increased until he was conscious of it most of the time; had been under care of a number of physicians and been to various sanitariums. At one time was committed to State Hospital because physician thought he imagined he had pain. Saw him first October 26, 1911. Examination showed he had very sensitive right vesicle, small prostate, four ounces of residual urine and a highly inflamed hypertrophied verumontanum which bled on touch with cotton swab. Massage of vesicle and application of stick nitrate to verumontanum caused him to report November 4, without any residual urine and pain very much improved.

In the past upon passing a sound the patient did not complain of any discomfort upon the passage through the anterior urethra but upon entrance to the posterior urethra complained that the instrument caused him considerable pain. I make it a rule now when a patient complains of pain upon passage of an instrument through the posterior urethra to examine with an endoscope and am surprised to find how frequent the cause is a diseased verumontanum.

The treatment that has been found most efficacious is amputation of the large hypertrophies followed by application with the

pure stick nitrate of silver. I have tried iodine, ichthyol and various other drugs but without satisfaction.

I show an instrument which I call a punch, for want of a better name. You will notice that although the instrument is slender it is very strong because of its direct drive. A bite or two taken from the tumor will cause a marked decrease in size. In the majority of cases the application of the silver nitrate alone is sufficient. In other cases the currette will take the place of the punch. This class of cases has been of great interest to me. I have seen over 225 cases and each one seems to present something novel. When the condition is present in a nervous highstrung individual, it may readily give rise to a secondary neurotic tendency far out of proportion to the original existing cause.

403 FRANKLIN STREET.

Perforations in Duodenal Ulcer.

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IN 1817 appears the first mention of duodenal ulcer in medical literature. It is a case report from Dr. Travers, of a male 35 years old, taken suddenly with excruciating pain in the upper abdomen. For a time the patient was in profound shock; the pain later was referred to the lower abdomen. He died in the bath tub 13 hours following the first onset of pain. Autopsy showed perforation of the duodenum. (Moynihan).

Not until 1894 did Mr. H. B. Dean report the first successful case treated by surgical means. Almost a century has elapsed since Mr. Travers' report, and we are today none too familiar with the diagnosis of this lesion. Within recent times we have been so engaged with the appendix, we have almost lost sight of several other conditions in the abdomen producing acute peritonitis. So prevalent is this opinion that of the total number of operations for perforation of the duodenum, in fully 25 per cent. of them appendectomy was first performed under the errors that the appendix was the cause of the trouble. In my own series of ten cases, this mistake has occurred in two instances. That duodenal perforation is by no means a rare condition, I have but to mention my personal experience of having operated four cases within a week's time.

A discussion on ulceration of the duodenum occurring in extensive burns, forms a part of every treatise on this subject, but the explanation of its causation is most difficult. Similar ulceration occurs in certain cases of Bright's Disease, but these are quite

as likely to occur in any other part of the intestine. In general miliary tuberculosis as well as in some instances of peritoneal tuberculosis, ulceration of the duodenum is occasionally seen. These areas are much more frequent in the lower portion of the ileum than any other part of the intestinal tract. Mr. Moynihan, however, has succeeded in collecting 34 cases of tubercular ulcer of the duodenum.

In autopsies of children dying from melena neonatorum, ulceration of the duodenum is not infrequently present.

While these rare conditions must be borne in mind, the chronic ulcer of the duodenum interests us more especially because here perforation is likely to occur. The literature of a few years ago teemed with references to gastric ulcers, occurring chiefly in the pyloric end of the stomach. More careful work showed that these ulcers on the pyloric end were just beyond the pyloric ring, and should strictly be classed as duodenal ulcers rather than gastric. In the majority of instances the ulcer is located so close to the pylorus, that the name pyloric ulcer might be more expressive of the true condition.

The etiology of these ulcers is obscure. Whatever the cause may be, it seems to be systemic rather than local, because of the frequency with which we find ulcers occurring simultaneously in both the duodenum and the stomach. There are many cases on record where perforation of more than one ulcer has occurred at the same time. The whole subject of the etiology is so wrapped in obscurity there is nothing definite left. The general belief is that they are due to some peculiar toxic action, while again it is thought they are due to some reflex cause such as the appendix. The frequency with which we find a diseased appendix in operation for duodenal ulcer is certainly very suggestive.

Recently Dr. Jacobson, of Syracuse, has discussed the subject of hemorrhage from the stomach and intestine, due to some toxic action. He believes such hemorrhage may come from a general toxemia, when no definite lesion is found in the intestinal canal.

In the developing embryo, two facts stand out of particular importance. First, the nerve supply of the whole intestinal tract with the exception of the upper stomach is such that we have no voluntary control. Consequently, through reflex stimulation, disease anywhere along intestinal tract may produce stomach symptoms, thus making differential diagnosis difficult. Second, in the early stages the intestinal canal is almost a straight tube, later with the development of the caecum the first part of the large bowel moves around to the right side, so that the transverse colon covers the duodenum. This makes the end of the duodenum a

pivot point and in the vertical position subject to more or less obstruction. The possibility of this being a causative factor in producing ulcer through back pressure of bile and pancreatic juice must not be overlooked.

Let me quote certain facts from a paper by Dr. E. A. Codman, Boston, Mass. In 3,000 autopsies at the Mass. General Hospital, an open duodenal ulcer was found once in every one hundred cases. Duodenal ulcers were found twice as frequently as gastric ulcers. Duodenal perforations occur 1-20th, to 1-40th, as frequently as acute appendicitis. In Mayo's statistics three-fourths of the cases were males.

The diagnosis of chronic duodenal ulcer is difficult, but far from impossible. Many today believe the diagnosis between chronic appendix, gall-bladder and duodenal ulcer is high impossible, and it is only necessary to make a surgical diagnosis, leaving final decision to exploration. When a case is explored by a capable man after a reasonable effort at diagnosis, it is a perfectly justifiable procedure; but, in many instances it is very bad practice because it breeds carelessness in diagnosis, and exposes many innocent medical cases to unnecessary surgical intervention. In the past the frequency with which gastroenterostomy has been done where appendectomy was indicated and vice versa, should teach us to devote more time to previous study in order to prevent similar mistakes in the future. Furthermore, I know of no class of cases where more definite information can be gained by careful study of symptoms alone. I have recently gone over the histories of my cases of perforation, and find they are most typical. Previous to perforation these were all cases of chronic indurated ulcer, and the diagnosis should have been made at that time rather than to wait for perforation to occur. While it is true that embryologically the development of the pylorus and upper intestinal tract is similar, and therefore any disease along the small intestines, gall-bladder, etc., may produce symptoms referable to the pylorus, yet I am satisfied that accurate, painstaking histories of these patients will often reveal the correct diagnosis. Let me quote here from the history of one of my recent cases of perforation as follows:

"I have always been well up to my present illness, save for some slight stomach trouble. It was never sufficiently serious for me to consult a doctor until three months ago. About ten years ago I noticed that I would have to get up at night because of stomach distress. I have always had my meals at regular hours, 5, 12 and 6 o'clock. The pain has never been severe, but was more a sense of bloating. I found that taking

a glass of milk would relieve me, so I frequently had it at hand on going to bed to relieve me during the night. The pain would come on about 11 o'clock. About a year ago I noticed I would have some distress about 4 o'clock in the afternoon, and quite lately I have had a little trouble about 10 in the morning. These attacks of distress were always relieved by taking food, so I got in the habit of carrying something in my pocket to relieve me when the distress would come on. For three or four days before this last attack I was having pain in my left shoulder."

Perforation took place in this patient one morning at 10 o'clock.

It is rather surprising how seldom vomiting occurs. In fact, this is rather a point in differential diagnosis, because in diseases of the appendix and gall-bladder patients frequently experience complete relief following vomiting. While vomiting does occur in cases of duodenal ulcer, it is usually in those late cases with contraction. Hematemesis may be present in either a gastric or duodenal ulcer. On the whole, vomiting is rare in duodenal ulcer, but frequent in the other.

Blood in the stools is of importance. Not every case of duodenal ulcer has even occult blood, but thorough search over a long period will usually show it to be present. Many times it will be learned from the history that the stools were black and tarry at some previous period. Each patient should be definitely questioned in this particular, because the history of the passage of any quantity of old blood from the bowel is very suggestive.

Hyperacidity, or sour stomach is always a constant complaint. Mr. Moynihan goes so far as to state that all cases of untraceable hyperacidity are cases of duodenal ulcer. This seems somewhat extreme, as we know hyperacidity may be reflex from other causes, as a diseased appendix or gall-bladder. It is high time, however, we discarded the term hyperchlorhydria to mean a distinct disease, or while many causes may exist or a temporary hyperacidity (all I think at times have experienced it) yet intractable hyperacidity means definite pathology somewhere. This pathology will usually be found in diseased appendix, gall-bladder, pancreas or duodenal ulcer. The swallowing of a loaded thread is of some importance. If there be found a blood stain above that of the bile, it is suggestive of an ulcer at that point. The distance between the two stains would represent the distance between the opening in the bile duct and the ulcer. In cases of active bleeding an accurate location of nearly the exact point could thus be made.

The statement is frequently made that patients have gall stones for years without symptoms. The same is occasionally heard regarding ulcer of the duodenum. These two statements I believe to be incorrect. The patient will frequently state to the careless historian that he or she has never had any stomach symptoms, but careful examination will reveal the old history of indigestion which the patient probably considered of no importance. I am convinced if more time were given to accurate histories of our patients, we would have fewer mistakes in diagnosis. Laboratory aids to diagnosis are very important, but they should be interpreted with great care to avoid error. On the other hand careful cross questioning of the patient, allowing him to express in his own way his symptoms, will frequently lead to positive diagnosis on the history alone. I would not minimize the value of laboratory, on the contrary would emphasize it, but I would appeal for the same painstaking work on the patients own account of his illness.

Again, at times, we reach a conclusion and then try to make our histories correspond with it. This is reversing the correct order and will lead to error. How often after such mistakes we go over the history with the patient and find a perfect picture of the correct diagnosis had we only properly interpreted it. In a recent case diagnosed as gall stones, I passed over lightly the patient's account of pain in the left shoulder. She barely mentioned the fact and as her other symptoms pointed so positively toward gall bladder disease, I omitted to go into that part of the history carefully. Pain in the *right* shoulder is very frequent in diseases of gall-bladder, liver and duodenum because of the connection between the phrenic and the suprascapular. Pain in the left shoulder goes through the sympathetics pneumogastric. This nearly always means an involvement of the pylorus, either with ulcer involving the peritoneum or in gall bladders adherent to this region. I did find gall stones present, but also found the pylorus densely adherent to the omentum due to pancreatitis. The patient was also tender in the middle of the abdomen, and careful study of her case might have led to a correct diagnosis beforehand. As both conditions were surgical, the matter was not of such great importance in this particular case.

Symptoms in many cases are atypical. Patients may have learned that more pain follows their heaviest meal, and may gradually refrain from eating to relieve them from the severe distress coming three or four hours later. Frequently these patients get so they take nothing but fluids, because while relief follows for a time, they suffer later. Again pain may come within an hour or may be delayed several hours after eating. Mr. Moy-

nihan believes the cases where pain is delayed have an ulcer located posteriorly and some distance from the pylorus. In one of my recent cases distress was said to come sometimes one hour and other times four hours after eating. At operation I found a healed ulcer at the pylorus and an active bleeding one, two and a half inches below the pylorus on the posterior wall of the duodenum. The patient was in poor condition, but under nitrous oxide and oxygen, I placed a circular suture around ulcer, completely controlling the bleeding. The hemoglobin rose from 25 per cent. to 56 per cent. in two weeks, and in eight weeks had risen to 85 per cent.

Briefly then when a patient complains of persistent distress from one to two hours after eating, with recurring attacks relieved by food, no vomiting, hyperacidity, a diagnosis of chronic duodenal ulcer can be made with considerable confidence. The matter of recurring attacks is important. In almost every case there is a complete relief of symptoms, but it is only for a time, varying from a month to several years. This periodicity explains many medical cures, and led one surgeon to say he never operated for ulcer until it was cured nine times by medical means.

Perforation of a chronic ulceration of the duodenum is one of the most serious conditions with which the surgeon has to cope. While I am quite aware of the excellent results following early suture in the acute cases, and drainage in the late localized forms, yet when a patient apparently well can be dead in twenty-four hours from the first onset of pain, we are dealing with a most serious disease. There are many classifications given of these cases, but the simplest from a clinical point of view is acute, sub-acute and chronic perforating ulcers. By the acute, I mean those with no attempt at walling off; by the sub-acute, those in which a piece of omentum or lymph temporarily occludes the opening and usually a large sub-diaphragmatic abscess occurs; and by the chronic, those which slowly perforate forming adhesions, and become entirely walled off.

Necessarily the mortality in these cases will vary according to type of peritonitis present. It is very low in the chronic, comparatively low in the sub-acute, but in the acute cases it must be estimated largely by one factor; namely, the length of time elapsing from the time of perforation to that of the operation. Spreading peritonitis from this cause differs in no essential particular from that following rupture of the appendix, where with each succeeding hour the mortality increases. If we could operate our appendices before perforation occurs, our mortality would be practically zero; and so could we but operate the chronic ulcers

before perforation occurs, the mortality would be correspondingly low. Are there any premonitory symptoms or signs which would lead us to make a diagnosis of beginning perforation? In probably the majority of instances perforation comes out of a perfectly clear sky, and the patient is almost immediately overwhelmed; but in quite a proportion of my own cases there have been symptoms which, if properly interpreted, might have led to a diagnosis of oncoming disaster. In three cases, for several days before perforation occurred, the patient had more pain and more local tenderness. This was sufficiently marked for them to mention it in their histories. In two of the cases pain in the shoulder occurred two days before perforation. If I interpret these symptoms correctly, they were the results of an involvement of the peritoneal coat of the bowel, and showed that only a thin layer separated the bowel from perforation. In my other cases there were no premonitory symptoms, unless we mention the old history of indigestion. This was present in all my cases. If we studied our cases thoroughly, we would know chronic ulcer to be present in that individual, and when acute pain developed, it would make the diagnosis comparatively easy.

Acute perforation of a chronic duodenal ulcer usually presents a perfectly typical picture. Exceptions may occur, but in the main they follow closely the picture here described. It is something different from any other abdominal catastrophe unless it be perforation of a gastric ulcer. The pain is very sudden and very severe. Patients assume an attitude bent over in bed, with thighs flexed on the body, eyes protruding, facial expression pinched and anxious, and extreme rigidity of abdominal muscles. It is different from any other abdominal lesion with which I am familiar. In peritonitis from an appendix, one finds a rigid abdomen, but not until late does it assume an absolutely board-like feel on both sides. Here also the abdomen is distended; but, in perforating ulcer, however, the abdomen is flat and almost immediately board-like rigidity is present. This is evidently caused by the sudden outpour of duodenal contents into the peritoneal cavity rather than by an infectious process, because sufficient time has not elapsed for infection to produce it. If seen very early, rigidity may be confined to the upper abdomen; if in a few hours, the whole body will be rigid but not distended. Distention comes on later. The pain and rigidity go together; first, in the upper abdomen, then down the right side to the pelvis and later over the whole abdomen.

In this condition I have often been impressed with the difficulty of accurately diagnosing fluid in the peritoneal cavity in

cases of perforation. It does seem as though the presence of gas in the peritoneal cavity renders the precussion note resonant, even though fluid be present. In typhoid perforation I have known four or five good men to agree there was no fluid in the peritoneal cavity and at operation find quantities of free intestinal contents.

The leukocytes in my cases varied from twelve to thirty thousand. The count is of some value in indicating intervention, but of very little help in differential diagnosis. In one of my patients I was able to elicit a sign which I have never before seen mentioned in this connection. I was fortunate in seeing this case within two hours of the time of perforation. It was a typical case, and listening with a sethoscope over the duodenum, I was able to hear fluid and gas gurgling through the opening in the bowel. This, of course, might have been conficted with the same process inside the bowel, but it was distinctly heard by two others beside myself and I believe it to be of value in some cases if seen sufficiently early. Through delay in obtaining the family's consent, operation, and at this time we could hear nothing over the duodenum, and at this time we could hear nothing over the duodenum.

Treatment of this condition is in every particular that of the treatment of peritonitis. In the chronic forms usually it will be only necessary to open and drain what is really a localized abscess, as the opening in the duodenum has probably closed as a result of adhesions. In any event it is rather dangerous practice to break through a well defined barrier to the spreading of the infection, even though the opening be still patulous.

In the sub-acute variety we have to deal with a somewhat different condition. Usually we have a rather large sub-diaphragmatic abscess, and in one or two instances I have seen there was very little attempt at walling off. In this type of case I would feel much more secure if the opening in the duodenum were closed, but on the other hand it might be bad practice if any walling off had occurred. Probably a middle ground is the safer one to pursue, feeling at the same time if the opening could be closed without too great a risk it would be preferable. Anterior drainage of these cases is often inefficient; posterior drainage through the flank being better in some instances. On the other hand less drainage will be needed if the opening in the duodenum be closed.

In the acute variety we are dealing with exactly the same condition as found in spreading peritonitis due to any other cause. Here I believe the method of treatment is fairly well established: First, to *quickly* close the opening whether it be from

appendix, gall bladder or ulcer; and second, to establish adequate drainage.

In the treatment of these cases time is a very important factor. The sutures are previously threaded, and the operator and assistants ready for work before the anesthetic is started. I have used as a rule either nitrous oxide or ethyl chloride anaesthesia, a little ether at times being necessary. In this way the patient is not usually under an anaesthesia over fifteen minutes. Fowler position is used as soon as the diagnosis is suspected. In most of my cases I found patients sitting up in bed on my arrival. In spreading peritonitis it is quite as important to establish the sitting position before operation as following it. The matter of irrigation is still a very greatly disputed question. I, personally, never irrigate any of these cases; in fact, I seldom irrigate any wound.

Regarding the matter of closing the perforation in these cases, there is quite a diversity of opinion. At times I have experienced considerable difficulty in delivering the duodenum into the wound, but after dividing the peritoneal fold on the upper surface of the duodenum, this can usually be accomplished in exactly the same way as is done in doing a Finney gastroduodenostomy. I have usually had trouble with the purse string suture because it was placed in friable tissue and would pull out. Consequently of late I have made an oval incision of the ulcer, closing the wound in the reverse direction after the manner of the ordinary pyloroplasty. While this may be of considerable benefit in the local treatment of the ulcer, yet the greatest benefit I think lies in securing more accurate closure. I have never known one of these cases to leak, although my experience has been limited. Dr. Elliott has shown in animals, no matter how extensive the excision of the wall of the duodenum, it is almost impossible to have permanent contraction occur. If this be true, it would seem to settle the question of gastro-enterostomy. In these cases if an anastomosis is to be considered, the operation of Finney is much preferable to the gastrojejunostomy. In the main, however, these cases are sufficiently serious to prevent doing more than accurate closure of the opening. If contraction should occur, the time for an anastomosis is when the patient has recovered from his peritoneal infection, rather than give any added risk at this time. I drain these cases with a stab wound in the pelvis, closing the primary opening. In one or two instances I have drained the upper wound where I have been afraid of leakage. All cases of spreading peritonitis and treated by the Fowler-Murphy method.

Mortality in acute cases varies with different operators, dependent almost entirely upon the length of time between the first

onset of pain and the operation. Mr. Moynihan reports 11 cases with 3 deaths. Mitchell of Belfast has had 19 cases with 18 recoveries; he has had the unusual experience of seeing this large number operated early. The report of deaths has usually occurred in cases extending over 15 hours after perforation. In view of this fact, how important early diagnosis becomes.

In my 10 cases of perforation, there have been 7 acute cases with 1 death; 3 sub-acute with 1 death. I believe the death in the acute case was due to patient refusing operation until 18 hours after perforation. In the sub-acute case, there was some walling off as I saw the case 8 days after perforation. I simply drained this immense cavity containing literally quarts of fluid without attempting closure of the perforation. The patient lived about a week, finally dying with rales over both bases and generally septic. Autopsy was refused, but the old incision was opened and perforation was found about two inches below the pylorus on the posterior wall of the duodenum.

Case reports are here omitted, but in reviewing same I find there have been seven (7) acute cases with one death. They were all males with an average age of forty-two (42) years. The average length of time between perforation and operation was seventeen (17) hours. In the one case failing to recover, operation was performed eighteen (18) hours after perforation. In the sub-acute variety there were three (3) cases with one death. This occurred one week after operation from general sepsis. The chronic cases have been much more frequent but they are not included in this report, as operation is usually nothing more than draining a well walled off abscess.

In closing, I would urge particularly: first, accurate histories taken of our stomach cases, as a diagnosis can frequently be made from this alone; second, particular care in chronic ulcer when superficial tenderness and pain in either shoulder be present; third, operation in perforated ulcers at the earliest opportunity; fourth, excision of the ulcer with suture in the reverse direction; fifth, gastroenterostomy is contraindicated in perforating ulcers; after excision contraction is almost impossible.

The Typhoid Epidemic in Corning

DR. FRANK S. SWAIN, Health Officer, Corning, N. Y.

FROM the 15th of April to the present time, May 15, 1912, the city of Corning has been in the clutches of a typhoid fever epidemic. It has been of no mean proportion, ninety-five cases in a population of 13,700 having been reported to the Health Department during that time. Five deaths have resulted, four

of which were among children between the ages of five and fifteen years.

Almost everyone is of the opinion that polluted city water was the cause of the epidemic. This idea is confirmed by the subsequent events, coupled with the results of expert investigation.

The city is furnished with water that comes from springs which are situated in the lowest part of the city. These empty into an impounding basin from which the water is pumped through the mains, all surplus water going into two reservoirs, one on each side of the city. Both of the reservoirs are enclosed with cement walls and roof. The idea in covering them was to prevent the growth of algae on the water, which is extremely hard in character.

Near the impounding basin is located one of the city parks, in which there is an artificial lake into which the overflow from the impounding basin is emptied. In the overflow pipe there is a shut off valve which is supposed to be closed during high water. The nature of the soil in the vicinity, and covering a large area about the impounding basin, is of a very coarse gravel, possessing little, if any filtering properties.

On or about March 29th the Chemung river, which runs through the city and also near the lower end of the park, became very high on account of the heavy rains. The result was that the water in this little lake overflowed its bank and soaked through the soil surrounding the immediate vicinity of the impounding basin. It has been alleged that the polluted water backed through the overflow pipe into the impounding basin. Be that as it may, on the morning of March 30th, Dr. Lundblad, the county bacteriologist, who examines the water daily, discovered its contamination and at once notified the health officer who in turn requested the superintendent of the water works to immediately treat the water with hypochlorite of lime, as has been the custom on several occasions during the past three years (about one-twentieth of a grain per gallon being used). The next day sickness prevailed throughout the city. Some fifteen hundred people were affected, nausea, vomiting, severe abdominal pains and diarrhoea being the characteristic symptoms and lasting from one to three days. It seemed to have played havoc among the people, the symptoms being more pronounced and the suffering more intense among the little ones. After about two weeks typhoid developed generally throughout the city, no part escaping and all classes being affected. Many of those who experienced bowel trouble immediately after the water became polluted afterwards developed typhoid, but there

were a few who had no diarrhoeal condition at all, constipation taking its place.

After some two weeks, Doctor Lundblad of the laboratory advised that the water from the public tap was free of any contamination, also the water in the impounding basin. However, the public was not advised for at least a week afterwards that the water has been declared safe for domestic purposes.

During the latter part of April the reports of the typhoid cases became so numerous and continued to such a marked degree, as high as eight in one day, that the health officer deemed it advisable to call upon the State Health Department for assistance.

Dr. Eugene H. Porter, Commissioner of Health of the State of New York, sent Mr. Theodore Horton, State Sanitary Engineer here to investigate the cause of the epidemic and to make such suggestions as he deemed pertinent to improve the situation. Mr. Horton stated that there was no question but that the source of the water supply became polluted and he directed the board of public works, which has charge of the water department of the city, to empty both reservoirs at once, treat them with hypochlorite of lime and then have them refilled, also that all dead ends in the water mains be opened and thoroughly flushed. On Thursday, May 9th, the water in the reservoir on the north side of the river was found to be contaminated. Immediate steps were taken to have the same purified.

The citizens have been aroused to the seriousness of the situation. Doctors, nurses, the families of those afflicted, milkmen, school children, and, in fact, everyone has been advised to exercise every precaution possible to stamp out the disease and to prevent further cases developing. It is being done.

A word as to the way the most of the typhoid cases are running. In the majority of the cases it prevails among children. The temperature will be normal in the morning and in the afternoon it will have gone up to 104, a pronounced headache accompanying, the usual step ladder temperature being absent. In many cases the fever has not been severe and a great number are now convalescing. The situation is well in hand now, but five cases having been reported during the past five days.

The old saying, "It is a bad wind that does not blow some good" will apply to this epidemic. Corning will be furnished with a new supply of water, one what will be pure and wholesome at all times.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

1864.

Friday, January 1. A very cold and wintry day, with a raw, searching wind. I worked all day at the hospital, having chosen a site on the plain towards the Fitzhugh Homestead; but when General Hancock, who is on a visit to the Corps, got sight of the tents going up he interfered, saying it was not a safe place for the hospital; so I came back in the midst of a snowstorm, and pitched my tent for the night near Corps Headquarters. Thus, the hard work of New Year's Day went for naught. The next day was spent in choosing a site for the three hospitals of the corps, and I was out with Dr. Dougherty upon that business until near night. Finally, a spot was fixed upon in the woods along the Corduroy Road, about half way between Corps Headquarters and Brandy Station.

Monday, January 4. I took a large fatigue detail into the woods and commenced felling the trees, clearing the ground, and otherwise preparing it for the tents. The work is a laborious one, and will occupy us for some days before we shall be ready for the sick.

January 5. Still very busy at work getting the hospital in order. We have two sawmills within the lines of the first Division, on the banks of a small stream that furnishes the power to run them. They have been put in order by Captain Hoyt, Chief Quartermaster of the Division, and he has furnished me with a supply of lumber for hospital use. The tents are being floored with this lumber, and it comes in very conveniently for many other purposes also. This work went on for a week, when everything was declared in readiness for the reception of the sick. I had written my wife to start for Washington on the 12th, and that I would meet her there, having obtained permission for her to visit me for twenty days.

On the 13th. I went to Washington on a two days' leave, to meet her according to promise. She arrived late at night, and I found her in the dining room of the Metropolitan Hotel taking supper at eleven o'clock P. M., with Major Ellis, 49th New York.

in whose company she had traveled from Buffalo. We remained in Washington during the 14th, and in the evening attended the theater (Ford's) where we met General Caldwell and wife. On the 15th, Thursday, we went down to the Army, and fairly established ourselves for the winter. I obtained a lady's saddle in Washington, and we were in the saddle together almost every day for the next two months. Mrs. Payne, Mrs. Arnold, Mrs. John Hancock, Mrs. Caldwell, Miss Jennie Kerner, and a few other ladies were our most intimate acquaintances in the First Division; but several ladies from the Second Division were our frequent guests.

The Third Corps issued invitations for a grand ball, to be given at General Carr's headquarters on January 25, and we received cards thereto on the 18th. We attended the ball on Monday, January 25, going over in an ambulance with Dr. and Mrs. Gesner. It was a successful affair in every way, and was attended by the ladies who were then present in the Army, and their husbands, as well as many other officers. The Hon. John Minor Botts, who lived in sight of the ball, attended with his two daughters. The supper, an elegant one, was sent down by special train from Washington.

MORTON'S FORD.

On Saturday, February 6th, the Second Corps was ordered down to the Rapidan at Morton's Ford, and had a skirmish there with the enemy. The Third Division, commanded by General Alexander Hays, was thrown across the river, and had a severe skirmish with the force defending the Ford. This Division lost about two hundred men in killed and wounded. No orders came for me to go with the Division. Nor was the movement known at the hospital until the firing was distinctly heard. We then inquired and learned the cause. The wounded, chiefly of the Third Division, were brought up and distributed to the hospitals of the corps, and cared for by us until their recovery. This was the first instance, so far known, during the war where the wounded after a fight were treated from first to last in field hospitals. I made several operations of a capital order, and sent the specimens to Washington where they were deposited in the Army Medical Museum. One man died with lockjaw several days after the fight. He was wounded in the thigh, and the ball was impacted just above the outer condyle of the left femur. At the autopsy it was discovered that the femur was fissured longitudinally, extending from the point of the impaction of the ball to the trochanters—an unusual wound. Mrs. Potter had an opportunity to assist in the care of these wounded soldiers, which she did with a kindly heart and thoroughly useful manner.

THE SECOND CORPS' BALL.

On Monday, February 22, Washington's Birthday, the Second Corps gave a grand ball at the headquarters of the corps near Stevensburg, or, to be more precise, at the Thom House on Cole's Hill. Adjoining the house a dancing hall was built, which required 12,000 feet of lumber to floor. This was seasoned pine borrowed of General Ingalls, Chief Quartermaster A. of P., which was smoothed and fitted by carpenters detailed from the ranks. The sides of the building were constructed of green hemlock which our sawmills furnished, and the roof was of canvas. It was lighted with 600 adamantine candles, the holders for which were especially made in Washington. The supper was furnished by Gautier, a Washington caterer, for which we paid him \$2,200 and furnished transportation for it to the camp. It was a subscription ball, no fees being taken for anything on that night, and no officer outside of the corps being allowed to subscribe; in other words, every visitor was considered the guest of the managers. Officers in the Second Corps who were solicited, subscribed according to rank or position, and my subscription was \$20.00.

General Meade, General Sedgwick, General Pleasanton, and other high officers were present, besides Vice-President Hamlin and daughter, Governor Sprague and wife (nee Kate Chase) Senator Wilkinson, of Minn., and other distinguished civilians. The distinctive flags of the corps' and the camp, and garrison flags, were festooned in an artistic way about the room. An orchestra was built up across one end of the hall, upon which were mounted two brass Napoleon guns with the requisite ammunition, and three bands furnished uninterrupted music till morning. The pickets at the Rapidan were doubled that night, and a Brigade was sent down within supporting distance of the picket line, so as to be in readiness in case of a surprise; but, happily, there was no attack, and all went off in splendid style. This was, undoubtedly, the largest strictly military ball ever given in this country, a pleasure to the participants and a credit to the managers.

February 23. General Meade reviewed the Second Corps and Kilpatrick's Division of Cavalry, in honor of the visitors which the ball had attracted. It was a beautiful day, soft and balmy as spring, and the ladies attended in full force and fine array, many of them mounted upon fine horses, and many others in ambulances and spring wagons. Colonel Ulric Dahlgren, of the cavalry, a son of Admiral Dahlgren, was conspicuous that day as the only one-legged officer present, and he was noted for his excellent horsemanship, notwithstanding his physical imper-

fection. Alas! He was soon to meet his death, even within a few days, which occurred during Kilpatrick's celebrated raid to the environs of Richmond, which he started out upon the next day after the review.

At the first Division headquarters a fine music hall was constructed early in the season, and here we met almost every night for some sort of an entertainment, lectures, balls, and hops being the chief amusements. Grace Greenwood (Mrs. Lippincott) gave us three or four of her characteristic talks, that bristled with wit, wisdom, and genuine loyalty. The days were spent in riding, visiting, witnessing drills, and artillery practice; the evenings in cards, or at the entertainments at music hall. The ladies entered into all the ways and sports of camp life with a will, and before the season was over were really veterans in all the methods and habits of military life. During the winter about four thousand women visited the Army, under the generous permission of the commanding General, and I am sure it did both them and the Army much good.

I had my wife's visiting permit extended twice for twenty days each time, so that she was with me sixty days altogether. We had a fine quarters, a hospital tent 14 x 16 feet for the front room, and a regulation wall tent 9 x 9 feet for the sleeping apartment. These rooms were both warmed by stoves, carpeted with army blankets, and were very comfortable. I obtained a church door down at a cavalry picket on the Rapidan, and had it fitted as a front door to my tent, which was the envy of all our visitors, as well as the pride of ourselves.

One day, about the first of March, while General Caldwell and wife were dining with us, in walked our cousin, Milton G. Potter, then in his senior year at Rochester University, and now visiting the Army for recreation and information. He had been spending a few days with the cavalry on our right near Culpepper C. H., and was quite surprised to find everything so comfortable and homelike in our quarters. He joined us at dinner, and remained with us a few days, though it was only his purpose to make a short call when he came. I took him to Division Headquarters the next day, and there made him acquainted with all the officers, which his previous meeting with General Caldwell greatly facilitated and relieved of that stiffness incident to first introductions. We also visited the Sixth Corps and other points of interest during his visit, and he was so well pleased with the manner of the entertainment we provided that he prolonged his stay to nearly a week, finally leaving with sincere expressions of regret. He wrote me afterwards how much he enjoyed his visit to the First Division, and this letter is preserved among my military papers, and so the winter wore away, all

too rapidly to be sure, for those of us who were so pleasantly situated.

On March 12 I obtained a leave of absence for ten days to go home with my wife, and on a bright Monday morning, March 14, we bade adieu to the festive scenes of camp life, and turned our faces regretfully northward. From Washington we went to New York where we spent two days, reaching home on the 17th. After a week of rest, part of which was spent in visiting friends, I started back on the 24th, arriving in Elmira Friday morning, the 25th, just ten minutes too late for the train over the N. C. R. R. for Baltimore, which compelled me to wait twelve hours for the next one south, so I did not reach Washington until after mid-day Saturday.

Sunday, March 27. I started for the front this morning, reached the hospital this P. M., and found everything in good order, Dr. Rowland having been in charge during my absence. I found the Army in a sea of mud, from the effects of a ten inch snow-fall the previous Tuesday, which had now melted and left the surface of the ground in a liquid state. Dr. Aiken, in charge of the Second Division Hospital, is sick; otherwise everything is as usual about the whole camp. I learn that negatives of the hospitals have been taken by Gardner during my absence, and two pictures have been ordered for me, that are to be delivered very soon.

March 29. It has been raining hard all day, which will delay a movement of the Army for the present. General Grant has arrived at Culpepper C. H., where he has taken up his headquarters. The Army has been re-organized, as has been contemplated for some time, and the Corps reduced to three, viz.: the Second, Fifth and Sixth, commanded by Hancock, Warren and Sedgwick, respectively. The Third Division of the Second Corps has been broken up and distributed to the First and Second Divisions; General Hays takes command of a Brigade in the Third Division (Birney's from the Third Corps); General Caldwell goes to Washington upon court martial duty; General Francis C. Barlow, formerly Colonel of the 61st New York, takes command of the First Division; Colonel Beaver's regiment, the 148th Pa., goes to the Fourth Brigade; General Webb goes back to a Brigade, and General Gibbon is assigned to the command of the Third Division. The Second Corps now has four divisions; two are made up of its own original three, and two come from the old Third Corps.

Dr. Dudley, 14th Conn., is now in the Second Division, and does not like the change at all; Dr. Gesner also goes to the

Second Division. Lieutenant Pelton is promoted to Captain, and is appointed Chief of Ambulances in Livermore's place. These are some of the changes that affect my friends or acquaintances. I visited the 57th yesterday, and found the officers all well excepting Dr. Nelley, who returned from his leave on Saturday, the 26th. Colonel Chapman has offered his resignation, but is doubtful about its acceptance, I imagine.

SOCIETY PROCEEDINGS

THE 7th Anti-Tuberculosis Congress was held in Rome, April, 1912. We are informed that Menciére of Rheims opposed the abuse of climatic treatment of osseous and articular tuberculosis, which he declared to be curable everywhere, by every practitioner who would give it proper attention. He laid great stress on iodoform ointment and "phenolization," in grave cases. The latter often prevents amputation and always cures without resection.

The Dental Society of the State of New York, on May 10, 1912, elected the following officers: President, C. F. Baylis, Oneonta; V. P., W. W. Smith, Rochester; Secretary, A. P. Burkhardt, Auburn; Treasurer, George H. Butler, Syracuse.

The Niagara Frontier Pure Water Conference, met in Buffalo, May 10, 1912. Hon. Wm. L. Mills of Tonawanda presided. He declared that a person contracting typhoid fever by drinking impure water had a cause of action against the municipality. Dr. E. H. Porter, State Health Commissioner, observed that it would be necessary to prove that the infecting water was actually obtained from the city supply. Some one in the discussion stated that a \$10,000 verdict on such an action had actually been awarded in Minnesota. Concerted action along the Frontier was urged.

The annual meeting of the Steuben Co. Medical Society was held in Bath, May 14. Officers were elected as follows: President, John Conway, Hornell; V. P., D. H. Smith, Bath; Secretary-Treasurer, W. W. Smith, Avoca; Censors, Frank Shaut, Addison; T. H. Pawling, Avoca; B. R. Wakeman, Hornell.

Women's Medical Society of N. Y. State

THE Sixth annual meeting of the Women's Medical Society of New York State took place in the banquet hall of the Hotel Statler on Friday, May 10, 1912. The Society was called to order by the President, Dr. Grace Peckham Murray. After the in-

vocation by the Honorary President, Dr. Eliza M. Mosher of Brooklyn the address of welcome was given by Dr. Jane Wall Carroll of Buffalo. The reports of special committees was followed by the President's Address on "The present status of Women in Medicine" in which she showed the great improvement in the position of women today compared with the struggles and difficulties that had to be overcome by the pioneer women in the early days of their admission to the profession, that today they had nearly as many advantages as their brothers in the field. She regretted however, that there seemed to be a falling off in the numbers entering the profession, that there was a tendency more towards a commercial life. She suggested that young college graduates should be urged to enter the medical profession as there was much missionary work and salaried positions awaiting them, and she hoped they could be persuaded to do so.

A very interesting paper was given by Dr. Edith R. Hatch on "Acute Pyelitis in Infancy" showing the frequency in females, rarely in males, and usually due to the colon bacillus. Errors in diagnosis. Importance of examining the urine in obscure high temperatures. Methods of collecting urine. Treatment.

Dr. Esther Parker of Ithaca gave "Facts Concerning the Physical Condition of Women during College Life" under four heads. 1—General Nutrition. Condition at entrance compared with later condition. Neuroses. 2—Menstruation. Irregularities. Dysmenorrhoea. Amenorrhoea. Nervous disturbances. 3—Thyroid enlargement. 4—Result of Gymnasium work.

Dr. Ida C. Bender, took up the "Present Status of teaching Hygiene in the School.

Dr. Cora Billings Lattin gave the "Report of the State Chairman of the American Medical Association, Public Health Education Committee.

The Morning Session was closed after the Election of the Following Officers: Honorary Presidents, Drs. Eliza M. Mosher, Grace Peckham Murray. President, Dr. Helena J. C. Kuhlman, State Hospital, Buffalo, N. Y.; 1st Vice-Pres., Dr. Angennette Parry, New York; 2d Vice-Pres., Josephine Walter, New York; 3d Vice-Pres., Edith Stewart, Hume, N. Y.; Secretary, Dr. Marian Craig Potter, Rochester, N. Y.; Treasurer, Dr. Edith R. Hatch, Buffalo, N. Y.; 1st District Councillor, Dr. S. Josephine Baker, New York; 2d District Councillor, Dr. Anna Craig, King's Park, L. I.; 3d District Councillor, Dr. Julia C. McNutt, Albany, N. Y.; 4th District Councillor, Dr. Julia Kimball Qua, Amsterdam, N. Y.; 5th District Councillor, Dr. Elizabeth McNight,

Oswego, N. Y.; 6th District Councillor, Dr. Sara E. Green, Elmira, N. Y.; 7th District Councillor, Dr. Evaline P. Ballintine, Rochester, N. Y.; 8th District Councillor, Dr. Jane Wall Carroll, Buffalo, N. Y.

The following committees were appointed: Scientific Program, Eleanor Parry, N. Y.; Sarah G. Pierson, Rochester, E. Josephine Baker, N. Y. Legislation, Rosalie Slaughter Morton, N. Y.; Ina V. Burt, Phelps, N. Y.; Cornelia White Thomas, Rochester. Public Health, Matilda K. Wallin, N. Y.; Elizabeth P. Thalberg, Poughkeepsie; Isabelle Thompson Smart, N. Y. Arrangements, M. May Allen, Rochester, Cora Billings Lattin, Buffalo.; Emily Dunning Barringer, N. Y.; Julia D. McNutt, Albany; Grace M. Kimball, Poughkeepsie; Frances Cohan, Yonkers, Helen D. Justin, Castile; Evelyn Baldwin, Rochester. Toastmaster, Grace Peckham Murray, N. Y. Elizabeth T. Corbett, N. Y. was elected Honorary Member and the others who became members were: Christiana M. Greene, Buffalo; S. Augusta Beebe, N. Y.; Jane North Baldwin, Poughkeepsie; Helen Montague, N. Y.; Ethel Blackwood Robinson, N. J.; Eleanor Tomes, N. Y.; A. B. Rice, Nova Scotia; Anna E. Voorhies, Ossining; Rosetta Sherwood Hall, Pyong Yang, Corea; Cornelia E. Brown, N. Y.; Barbara Curtis, Poughkeepsie; Emma A. Selkin, N. Y.; Nadina R. Kavinoky and Lucy A. Kenner, Buffalo; Isabel McMillan, N. Y.; Elizabeth Gillette, Schenectady; Agnes Page, Albany; and Cora Ballard, Brooklyn.

In the afternoon there was a Symposium on Sterility:

1. Definition, general remarks, ratio, statistics, by Dr. Katherine S. Munhall;
2. Mechanic causes in women; vaginal, cervical, tubes and ovaries, non-development, by Dr. Angenette M. Parry, N. Y.;
3. Inflammatory causes: Colpismus, endometritis, salpingitis, oophoritis, physical causes, Edith Stewart, Hume, N. Y.;
4. Artificial Impregnation, Dr. Eliza M. Mosher, N. Y.;
5. General Treatment, Dr. Sarah J. McNutt, N. Y.;
6. Operative Procedures, their utility and results, Emily Dunning Barringer, N. Y.

The annual Banquet was held Friday evening at the Hotel Statler. Dr. Ida Bender was a charming toast-master and very gracefully introduced the different speakers. Dr. Grace Peckham Murray, the out-going President, spoke on the Past of the Society and Dr. Helena Kuhlman, the in-coming President, on the "Future." After these more serious speeches, followed those in lighter vein, paraphased on Shakespeare's Seven Ages of Man. Dr. Maude Frye spoke of the Infant. Dr. Marian Craig Potter disposed of the exuberant energies of the "Whining School-Boy." The Lover was charmingly described by Dr. Parry on the ground

that one could speak best of that of which one knew the least as the imagination could supply the deficiencies. The Fourth Age arranged to apply to our brother M. D. that we cannot resist the temptation to reproduce it.

"Here's to our brothers who live at their ease
Whose Conscience allows them to do as they please,
Whose fads and whose follies and foolish ideas,
Are brought to us yearly from over the seas
Here's to those brother M.D's.

Here's to them who are eager for Fame
Who want to write Glory all over their name,
With Teddy the Bold they're one and the same,
"Here's hoping they'll win" we gladly exclaim
Here's to those brother M.D's.

And here's to those who have no use for us
Who never can meet us without a cuss
'Tis a fact we deplore, but it might be "Wuss"
It's not worth the least of a bit of fuss
Here's to those brother M.D's.

And here's to—"God bless him"—our noble Ideal
Whose Christian Charity's a quality real,
Whose life and whose love makes all men feel
'Tis a wonderful gift to be able to heal
Here's to that brother M.D."

"And then the Justice" was the topic for Dr. Lettie H. Woodruff of Rochester and Dr. Bender filled in the succeeding toast, also a rearrangement of Shakespeare as "Shifts into? The last scene of all" responded to by Dr. Mosher, Honorary President of the Society and practicing physician for 37 years. Her retrospect of the value of the study of medicine, not only to the world at large, but to the individual student and practitioner was a charming close to the program. Dr. Maude Frye was chairman of the Committee of Arrangements, the other local member being Dr. Edith R. Hatch.

On Thursday evening the Officers and Councillors and Physician's League were entertained at dinner by Dr. Jane Wall Carroll.

THE ROCHESTER PUBLIC HEALTH ASSOCIATION held its annual meeting May 13, 1912. Dr. Henry T. Williams was elected

President; Dr. Williams, Dr. G. I. Bidwell, Dr. John M. Lee, were among the directors chosen; Dr. Montgomery E. Leary was elected a member of the Executive Committee and Dr. Edward G. Whipple continues as Executive Secretary, in charge of the dispensary. The present dispensary building on South Washington St. has been outgrown and plans are under way to secure additional funds and to erect or purchase a larger and more modern building.

THE MEDICAL SOCIETY OF THE COUNTY OF MONROE held its regular May meeting at the Hotel Seneca, Rochester, May 21. At the dinner preceeding the meeting, 70 were present, about half the total attendance. Dr. Howard Prince of Ithaca presented a paper on Surgery and the Patient, Dr. John M. Swan on the Importance of Blood Examinations, Dr. E. H. Howard on New Laws Relating to the Mentally Defective.

The most noteworthy business transacted was the preparation of a list of Medical Experts in Insanity. This is a new departure and has for its object the elevation of the standard of medical expert witnesses. The matter was discussed in the May issue of the BUFFALO MEDICAL JOURNAL (page 551) by Dr. Seelye W. Little who deserves the credit of originating the idea. The method has been applied only to alienists as yet and is as follows. A liberal list of nominations is presented by the Board of Censors and a two-thirds vote of the society is necessary to elect. The list will be sent to all judges and lawyers in the county, and though they are free to choose any other person as expert yet the fact that a man is one of the list of experts will presume in his favor. Thus by qualifying our best men the profession will be put into a more dignified position than it has held in the past. It is proposed that lists in the other specialties will ultimately be prepared and that they will be kept revised and additions made as necessary.

The Experts in Insanity for the present are 13 in number as follows:

Dr. E. H. Howard, Dr. E. B. Potter, Dr. I. L. Walker, Dr. W. H. Veeder, Dr. E. P. Ballintine, Dr. M. A. Nickerson, and Dr. Sarah Pierson, all members of the Staff of the Rochester State Hospital, and the following residing in the city—Dr. E. B. Angell, Dr. E. L. Hanes, Dr. W. J. Herriman, Dr. P. W. Neefus, Dr. A. C. Remington and Dr. C. A. Van der Beek.

ABSTRACTS

Water-Drinking and Drinking-Water

By DR. KUHNER, of Eisenach, Doctor of Physiology
Translated Extract from the *Balneologische Zeitung* (Berlin) of
the 20th January, 1912, No. 2.

THE question as to the use of drinking water at meals is still in dispute, many doctors holding to the teachings of the Salernitan School that the juices of the stomach may become too dilute, so that digestion is impeded.

This is an error. Since the ferments have been studied and found to be of enormous strength, especially so with the diastases, the assumption appears to me to be untenable that water drinking during meals could hinder the process of digestion. Also the free hydrochloric acid contained in the juices of the stomach might be diluted to a far greater extent than is effected through drinking water at meals without the digestion suffering in the least. The effect of ferments in the stomach is rapidly produced even by solutions, which are only weakly acidulated. Moreover, the Russian Investigator—Pawlow—found that immediately after thorough washing of the stomach, the degree of acidity is unaltered. Finally Ruzika, by exact experiments on himself, showed that half a litre of water drunk during the mid-day meal did not hinder the absorption from nutritive substances at all. On the contrary, if one reduces the fluidity of the food too greatly there is incomplete contact between the ferments and the hydrochloric acid on the one hand, and the food on the other, and the solution by the pepsin is seriously delayed. Then again, if we keep to a dry diet too long, the effect on the albuminoids is left incomplete. The individual suffers seriously from loss of nourishment, fat and muscles are greatly reduced and the person rapidly grows thinner. . . . The quality of the drinking water is no less important than the quantity. What are the requirements which one should lay down for the quality of the water? In the first place by bacteriologic examination it must be ascertained that the water is free from pathogenic microbes. Even the colon bacilli which are present in the drinking water of many places in large quantities are not above suspicion. Fortunately, consumers are able, by boiling for 40 minutes, to sterilise any water sufficiently to make it potable. Any drinking water should be rejected which contains more than 100 germs in a cubic centimetre.

. . . Other surface waters too are very frequently tainted. The increasing overpopulation of Germany and its manufacturing industries work in this direction, the flushing drainage system

(without filtering-beds) being especially responsible for the pollution of the rivers. It is very regrettable that so many parishes allow the solids simply to pass into the river instead of by a rational system employing same for agricultural purposes. In his treatise on "The Necessity for Keeping German Waters Clean" Bonne complains as to this: "The Germans," he says, "have a high degree of culture, but at the same time stand on the lowest step of uncivilization. While they have dirigible airships and light and heat and motive power from electricity along with the telegraph and telephone, they still allow the whole of their waste to run into their rivers and lakes, instead of using it to cultivate their heaths and stretches of sand. Fish die in the poisoned water. But human beings wash in and drink it, although, even diluted and filtered several times it still contains impurities of human origin and often is the cause of great epidemics of disease."

This Jeremiad is not without reason. How far are we from the hygienic principles of the Persians of whom Herodotus tells, that they revered the rivers and would not allow people to wash their hands in them or any impurities to be thrown into them. Today we smile at such devout simplicity, but we cease to do so when from our polluted rivers vengeful plagues arise, as in 1892 cholera from the waters of the Elbe at Hamburg, and in 1901, typhoid at Gelsenkirchen from the river Ruhr. The first act of the tragedy is always pollution, the second, disease, for it is in the dirt that bacteria flourish. What is so called self-purification of the rivers is only apparent, and is no real cleansing; it is a hypothesis to deprecate sins against hygiene, and it calms our scruples. In reality the impurities which are conducted into the rivers are only hidden; they go out of sight, but they have not lost their power for harm. The apparent self-cleansing of a river chiefly means that down the stream far from the place where the impurities have entered, and after much mud has sunk to the bottom of the river, and especially after this river has taken up the waters of many tributaries, which may still be clean, the water of the river becomes purer again. But there can really be no talk of any actual self-cleansing of a river.

TOPICS OF PUBLIC INTEREST

ST. PAUL now boasts of a 12-story office building exclusively for physicians and dentists. It is a block long, 50 feet deep, 200 feet high, with laboratory and emergency operating room on the roof. The building is fire-proof, sterilizable and has all sorts of devices

for the safety and convenience of its occupants. The cost was a million.

Think of all that expense and bother, when all that is necessary is an old family mansion, with a new coat of paint, a little plaster of Paris in the rat holes, and a few partitions.

Ithaca has just lost a \$50,000 school building by fire. 500 children just escaped with their lives, not even having time to get their wraps. Last winter, the high school burned. Buffalo has recently lost the Masten Park High School. Fire drills, efficient discipline and cool headedness of teachers and pupils have prevented loss of life in these three recent large fires of school buildings. But the BUFFALO MEDICAL JOURNAL sticks to its contention that every school house of any considerable size, built after today, should be as nearly fire-proof in its construction and equipment as is at all possible—not simply because of the direct danger, but because fire-proof construction and equipment imply approximate germ-proof environment and because both as a protection against fire and bacteria, the school house if properly built would be a constant object lesson to every pupil in attendance.

Tobacco Facts

HERE are some facts on tobacco in the United States, taken from the internal revenue reports from 1911:

Output of large cigars in 1911, 7,270,144,822; increase, 200,336,076.

Little cigars in 1911, 1,207,748,118; increase, 160,010,239.

Cigarettes in 1911, 9,828,682,005; increase, 1,184,124,915.

Manufactured tobacco, pounds, 389,865,917; decrease, 54,275,433.

THE so-called West Farm site has been secured for a Tuberculosis Hospital for Buffalo, at a cost of \$650,000.

EXAMINATION FOR ARMY MEDICAL CORPS, will be held July 15 and September 3, at various points which will be selected so far as possible, to accommodate the majority of applicants. Full information may be secured on application to the Surgeon General, U. S. A., Washington, D. C. Without anticipating such information, we may say that there is no use for any one over 30 to apply, nor for one who has not had a year's hospital experience, nor for anyone who has not at least a fair general education, nor for anyone who cannot pass somewhere near the upper ten per cent. of a class. Nor do we believe that it

is worth while to seek appointment unless with the idea of making a life work of it. The pay is good, much less than may be made in private practice, much more than most physicians do make; the work is interesting and not too hard; ample vacations are allowed and, while one is theoretically under orders, practically he is much more independent than in private practice. 68 vacancies exist, about enough for $1\frac{1}{2}$ per cent. of the graduates of last year.

In the decade 1901-1910, the general death rate of the U. S. fell from 1655 to 1495.8 per 100,000 living. Meantime, the tubercular mortality fell from 196.9 to 160.3. It may be considered certain that the tuberculosis death rate is declining, both relatively to population, and to the total death rate. And we may add, as a personal opinion, that it is phthisiophobia that has done it, not that mere fear of the disease could have availed anything, nor with disregard for the trend of education, but in the sense that the people would not have been taught if they had not feared and avoided the disease.

LATE in April, a dentist of Smethport, Pa., treated an ulcerated tooth for a patient who, next day, was discovered to have small pox. The dentist broke quarantine and the police of several places are searching for him. We have inquired as to the result but the local Police Headquarters are unable to give any information.

STERILIZATION OF CRIMINALS. Certiorari proceedings have been brought to test the constitutionality of the recently passed New Jersey law, the first victim having been selected for operation. The usual contention that the law is "cruel, inhuman and unusual" will be made. A similar law has just been signed in New York, six states in all now providing for sterilization.

METHYL ALCOHOL POISONING. What at first appeared to be botulism, among a number of inmates of a night shelter in Berlin, has turned out to be wood alcohol poisoning. 89 deaths and 5 cases of total blindness have resulted. The man who prepared the beverage has been sentenced to five years' imprisonment—which rather upsets our ideas as to the rigor of German justice.

REPORTING TUBERCULOSIS. In the last four years, 32 deaths from tuberculosis occurred in Tonawanda, one previously reported to the board of health; in N. Tonawanda, 41 deaths, 11

previously reported. Dr. Charles S. Prest of the State Department of Health has recently been in the Twin Cities, asking disagreeable questions as to why the law has not been obeyed. He expects to return June 3, to be still more disagreeable to any physicians who persist in violating the law. It was just on account of such occurrences, and to save our readers trouble, that we secured the very valuable summary of the laws and ordinances, from Dr. Fronczak. Our columns are the proper place to thresh out questions as to the advisability, rationality, efficiency and improvement of health laws.

THE University of Buffalo announces the following faculty changes:

Dr. F. C. Busch has resigned, as Professor of Physiology and will be succeeded by Dr. Frederick H. Pratt who is, at present, teaching this subject at Wellesley College and who was formerly assistant in physiology at the Harvard Medical School. Dr. Pratt enters upon a position of distinction. The experimental teaching of Austin Flint, the founder of the BUFFALO MEDICAL JOURNAL, was pioneer work not only for the University of Buffalo but for the medical world. Many men in active practice today remember the lucid and entertaining lectures of Julius Pohlman who, more than the great majority of teachers in any line of thought, had the knack of drawing practical lessons from theoretic science and of impressing his points so that they remained permanent in the mind of the pupil. With Dr. Busch, was inaugurated the standard of more recondite methods in a branch which, according to the older custom was regarded by students as of minor importance and therefore, justly demanding a small share of their attention and effort. Dr. Busch leaves the didactic field in order to devote his time to the clinical work of the N. Y. State Cancer Hospital and Dr. Pratt's assumption of service marks a further step in medical education, namely the recognition of a distinct didactic profession. While on many accounts, the association of students with teachers who were also men in active practice, has been and is an advantage and probably must continue for certain subjects, the relegation of medical teaching to teachers has a great advantage on the didactic side and also obviates the friction, lack of harmony and ethical restlessness of the profession to which the joint assumption of practice and teaching has unfortunately led to in many instances.

Dr. DeWitt H. Sherman succeeds Dr. Eli H. Long as Professor of Materia Medica and Therapeutics. It is a logical pro-

motion, inevitably calling forth the regret that time is passing, yet the regret is mitigated by the fact that the change long anticipates any necessary or established age period. Rather let us take pleasure in complimenting both men on excellent work, and in extending good wishes for future activities.

As was expected, the recent appointment of Dr. Herbert Upham Williams as Acting Dean, has been made permanent.

PREVALENCE OF TYPHOID IN BUFFALO.—The warning to boil the city water has, possibly, given an erroneous idea that an epidemic exists. As a matter of fact, typhoid has been less prevalent than usual except that, with the late breaking up of the ice in the lake and the agitation of the water, there has been the usual increase but thrown into May instead of an earlier month. The figures are as follows (courtesy of Dr. Gram.)

1911		1912
33	January	26
56	February	16
64	March	10
33	April	20
33	May	39 up to May 18
219		111

THE BUFFALO ASSOCIATION FOR THE RELIEF AND CONTROL OF TUBERCULOSIS, at its recent annual meeting, urged the erection of a special children's hospital on the Perrysburg site. In view of the present high tax rate of Buffalo, it was suggested that the amount necessary, \$10,000 for a temporary structure, be raised by popular subscription. Mr. Irving S. Underhill was elected President.

THE POSTER ADVERTISING ASSOCIATION, comprising 3,500 firms throughout the United States, has decided to refuse patent medicine advertisements and will endeavor to eliminate objectionable theatric advertisements. We have previously voiced the optimistic sentiment that, in the long run, the medical profession can depend upon the support of business men generally, for any movement in the interest of the community, provided that we do not inject too much professional "ethics" into it.

THE BOARD OF HEALTH of Corning has authorized the employment of a visiting nurse to care for and to discover tuberculous cases.

THROUGH the generosity of Mr. Arnold Gregory, a large and well located residence has been bought in order to provide Albion with a hospital. As the Benedict and the Gregory boys began marrying each other's sisters about as soon as they landed in this country, we feel almost a personal, at least a family interest in Mr. Gregory's gift.

THE following state civil service examinations, to be held June 15, may interest physicians. For detailed information and application blanks, address the State Civil Service Commission at Albany. Inspector of Vocational Schools, male, \$2,500. Medical Interne, state hospital service, \$600 and maintenance. Health Officer and Inspector, Canandaigua, \$400.

New Inventions

Frank Kuhn, Detroit, Mich. Assignor to Amer. Electrical Heater Co., Detroit, Mich. 1,025,144. Electric Footwarmer.

F. J. Jaubert, Paris, France. 1,025,191. Cartridge for the Preparation of Oxygen.

H. W. Sanford, Washington, D. C. 1,025,207. Surgical Kit.

E. M. Grindle, Holton, Kas. 1,025,265. Cheek-Distender.

Jas. Birrell and Wm. Birrell, Seattle, Wash. Assignors to Birrell Vacuum Vibrator Co., Seattle, Wash. 1,025,504. Combined Vibrator and Vacuum Apparatus.

C. A. Howe, Chicago, Ill. 1,025,571. Foot-Support.

T. J. Donovan, Syracuse, N. Y. 1,025,612. Bathing Machine.

R. M. Machlett, New York, N. Y. 1,025,635. Gas-Regulator for Gas-Tubes.

D. M. Don Jian, Washington, D. C. 1,025,903. Device for Removing and Curing Corns.

J. F. Craven, Pittsburgh, Pa. Assignor to Craven Engineering Co., Pittsburgh, Pa. Receptacle for containing and discharging semisolid and pasty substances. 1,025,511, 1,025,512 and 1,025,513.

Franz Elger, Basel, Switz., assignor to Hoffman-La Roche Chemical Works, New York, N. Y. Process of Separating Meta- and Para-Cresols. 1,025,616.

G. F. Jaubert, Paris, France. Cartridge for the preparation of Oxygen. 1,025,191.

Otto Schmidt, Mannheim, Ger., assignor to Badische, Anilin & Soda Fabrik, Ludwigshafer-on-the-Rhine, Ger. Chlor-Aralkyl-Sulfonic acids and process of making such compounds. 1,025,652.

Heinrich Hoerlein, Vohuinkel, near Elberfeld, Ger., assignor to Farbenfabriken vorm. Friedr. Bayer & Co. Phenylethylbarbituric Acid. 1,025,872.

Nathan Sulzberger, New York, N. Y. Chloral Derivatives containing the Radical of a Fatty acid. 1,025,889.

Otto Liebknecht Frankfort-on-the-Main. Ger., assignor to Roessler & Hasslacher Chemical Co., New York, N. Y. Stable Hydrogen-Peroxid Solution. 1,025,948.

1,023,803. Sucking Bottle. Chas. DeBock, Lele, Belgium.

1,023,822. Teething Finger. Arthur Dubay, Gardiner, Me.

1,024,152. Method and Means for Producing Dental Plates.

Henry J. Smith, Phila, Pa.

1,024,153. Dental-Plate. Henry J. Smith, Phila, Pa.

1,024,122. Medical Spraying Syringe, Moritz Saenger, Magdeburg, Germany.

H. J. Morris & J. A. Cowlyn, Kansas City, Mo. Artificial Limb. 1,026,109.

H. M. Crawford, Lima, Ohio. Electric Water Heating Syringe. 1,026,564.

W. H. Herman, Wesson, Miss. Bottle-Vending Machine, 1,025,978.

Robert Kahn, Frankfort-on-the Main, Ger. Assignor to Farbwerke Vorm, Meister Lucius & Bruning Höchst-on-the-Main, Ger. Arseno Compounds and process of making same, 1,026,094.

O. C. Schultz, Chicago, Ill. Assignor to Bauer & Black, Chicago, Ill. Machine for making Surgical Bandages, 1,026,283.

Fred Bedford and Chas. Edw. Williams, Sleaford, Eng. Process for the conversion of Unsaturated Fatty Acids, their Glycerids and Esters into the corresponding saturated Compounds, 1,026,339.

M. L. Rusk, New York, N. Y. Water-Bottle for Infants, 1,026,460.

J. D. Wise, Jackson, Tenn. Medicine-Dropper, 1,026,541.

M. H. Shoenberg, San Francisco, Cal. Assignor to The Presto Electrical Mfg. Co., San Francisco, Cal. Electrically-Heated Syringe. 1,026,611.

Donald McKay, Collingwood, Ont., Can. Truss. 1,026,758.

J. K. Toles, Berkeley, Cal. Combined Container and Cutter. 1,026,778.

Wilhelm Hiemenz and Walter Kropp, Elberfeld, Ger. Assignors to Farbenfabriken Vorm Friedr. Bayer & Co., Elberfeld, Ger. Pharmaceutical Product. 1,026,913.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

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There are no round trip tickets on the D. & O. road.

Typhoid Carriers

DR. WILBUR A. SAWYER (*Jour. A.M.A.*, May 4, 1912), reports 27 cases of typhoid with four deaths, due to a male carrier on Pacific ships. Edward R. Bigelow (*idem*) refers to a previously reported case, apparently male, from which 213 cases arose, and to several others, causing smaller epidemics, and suggests that the Widal test may be useful to detect them. Frederick M. Meader of Syracuse, at the latest meeting of the Medical Society of the State of New York, reported good results from immunization although, in the discussion, the point was raised whether immunization could be expected to prove efficient, on the ground that in the healthy carrier, the bacilli were probably merely saprophytes and not growing in or producing reactions with somatic structures. Abraham Jacobi stated that he had refused to take an active part in a crusade against carriers until water and milk supplies had been brought to a satisfactory condition.

All of these problems must be considered sub judice, requiring careful checking of theoretic with empiric knowledge. While the whole subject of "carriers" is of comparatively recent date and while the previous knowledge of diphtheria carriers did not, for a long time, suggest generalizations which now seem both obvious and practical, it may now be held that the medical profession is pretty well aroused to the importance of "carriers" in both an academic and a clinical and hygienic sense. At the

same time, we ought to realize thoroughly that actual information as regards details, is extremely meagre and that every suspicious case should be fully investigated, both with reference to immediate prophylaxis and to more remote possibilities of developing general means of detection, immunization and disinfection.

The exact status of the parasite and host, in carriers, is a matter of the widest importance. For instance, if specific (active) immunization proves efficient in the treatment of typhoid carriers, we must conclude either that the carrier, though symptomatically healthy, is still in a state of disease, either locally or generally; or else that immunization produces an effect that is virtually extra-corporeal and which may indeed be considered as closely analogous to an excretion.

The extent to which germ-carrying applies to infections generally, is another problem of the highest interest, practically and theoretically. A clear-cut distinction between adventitious and essential conveyance of disease is already possible in many instances, if we regard such extremes as scarlet fever distributed by a furry pet which does not, itself ever contract the disease, so far as we know, and, on the other hand, malarial conveyance by anopheles. But closer study shows that there are many instances in which the distinction can not be made.

Another question of importance is whether "carrying," in this sense, is necessarily a sequel of an active infection. In the case of diphtheria, we know that persons in good general health may carry bacilli in the throat or even have a mild local reaction—the so-called follicular amygdalitis occurring in persons exposed to diphtheria and croup, noted by our predecessors. It is not impossible that many infections may exist in atypic, relative forms, not producing marked or even appreciable symptoms and still representing genuine reactions to the specific germ, and being contagious or infectious in more than an adventitious sense.

Some of the reports mentioned throw doubt on the common opinion that typhoid carriers are mainly females. A little reflection will convince us that females are more likely to arouse suspicion as carriers, indeed more likely to disseminate the disease on account of their more frequent employment in domestic service and of their coming more closely and more continuously in contact with the inhabitants of a given house or institution.

There is one favorable point in Sawyer's case that, while not at all technical or scientific, deserves emphasis. The carrier, on learning of his career, "showed deep concern and voluntarily entered the hospital."

In Buffalo, for several years, a disproportionate number, sometimes an actual majority of typhoid cases, are found in hos-

pitals. What is being done to prevent further infection from these cases? Is the routine disinfection, not only of faeces but of other discharges, being properly carried out? We know academically, that typhoid bacilli occur in the urine in about 20 per cent. of all cases. We also know, academically, that bacilli persist in various localities for varying lengths of time, short of the relatively permanent persistence noted in "carriers." One more thing we know academically—how to detect the presence of the typhoid bacillus. How far are these academic principles being made practical. Are our typhoid patients released from quarantine only after the demonstrated absence of bacilli, as in the case of diphtheria? What is the answer to these same questions in other places? Why not answer some of them, right in our own territory in such a way as to establish a precedent for the rest of the country?

A Question of Graft

THE editor has recently been asked to denounce a movement, noted as a matter of news in a recent issue, and regarded at the time as a commendable arrangement for the care of unfortunate patients. Without entering into details, we may say that the claim is made of the regular, old-fashioned exploitation of public philanthropy, for private ends. While we are willing to hit from the shoulder, in a question of right and wrong, we do not believe in stirring up quarrels and, in the present instance, the remoteness of the institution attacked and other circumstances, prevent a personal investigation. We are perfectly willing to give space to reasonably brief and temperate discussions of any ethical problem arising in our territory or applying to it.

Would it not be better to deal with this question, which is continually arising and continually fomenting professional discord, on broad lines of scientific prophylaxis? Is not the profession well enough organized at present, to look after its own interests and, incidentally, after the interests of well disposed members who, under older methods, were really innocent tools of designing schemers and who are still, to some degree, the victims of a bad and obsolete system of patronage? Certainly no one would claim that private individuals, privately selected, should benefit by public taxation, nor that charity publicly asked for the discharge of a public duty to the sick and poor, should redound to the profit of a favored few.

Private feuds in the profession, washing of dirty linen in the presence of representatives of the popular press, individual attacks on individuals or selected institutions, do untold harm to the profession. Let us act harmoniously and with a unani-

mous and sincere determination to formulate proper rules and to apply them impartially, with due regard to ability, experience and demonstration of fitness and devotion, but with fairness to all.

Opposition to Restriction of Immigration

WE regret to note that organized opposition is being made to the regulations of the U. S. Government concerning immigration, especially as the opposition is made in the name of foreign nationalities.

The Immigration problem, contrary to what might at first appear, does not involve race problems to any great degree, except in the historic sense of including the forced importation of negroes and in regard to the restriction of Mongolian immigration. The former phase may be regarded as a permanently closed issue. The latter is pretty definitely closed by treaty, although it may prove to be merely latent and perhaps in the sense that latency applies to a volcano between eruptions. At any rate, it is not a phase of the problem with which the present agitation is concerned.

There undoubtedly was a time in the history of the United States when restriction of immigration was a public issue, involving race prejudice, not so much in the sense of a prejudice *against* any particular race as of a prejudice *for* the establishment of a relatively pure race. This time is long past; it is just barely reached by the memories of old men and women; the issue is permanently settled by the fact that about two-thirds of the present population is foreign relatively to the one-third whose fathers, grandfathers and great grandfathers, discussed the pros and cons of "knownothingism" and decided against it, and in favor of what was then denounced as mongrelism.

Almost precisely the same sentiment arose among the Dutch of South Africa and, a decade ago, there was the same struggle between pure and mixed blood and the same ultimate decision though, in the case of the United States adopted by the deliberate vote of the native population, while in the case of the Boers, it was forced by external pressure.

The sentiment in favor of keeping its own blood pure seems to have been instinctive among most primitive peoples although ethnologists are generally sceptic as to the actual purity of the blood of most tribes and nations. The know-nothing sentiment among the Dutch of South Africa was, however, rather more logical than among the Americans of the early nineteenth century. It is true that there had been comparatively little immigra-

tion into the northern colonies from about 1700 to about 1830, but the southern colonies as well as Pennsylvania had received considerable accessions only a few years before the Revolution. Most school histories convey the impression that the colonial American is a sort of transplanted Englishman although they state that there were considerable colonies or accessions of Dutch, Swedes, Germans, Scotch, French and others. The colonial American is very far from being a pure blooded Englishman and, if he were, it is worth while considering that the English, at the beginning of the period of American colonization, were a mixture of almost as many races as actually came to the American colonies in the 17th and 18th centuries, that the mixture was not so thorough and that, indeed, the addition of the last important ingredient, the Norman, was not much more remote from the period at which American colonization by the English began, than is that period from the present.

A vastly more important point than the mere history of the way in which the European races have woven their political divisions, is that they were originally a unit and that they have split off into tribes, rejoined one another, again divided and come together in such complicated ways that racial distinctions, as between American, English, French, Dutch, German, etc., amount to about the same thing as streaks in molasses candy while it being pulled.

What is of infinitely greater importance than race—limiting the discussion to the subdivisions of the Aryans—is the development in an individual or in a family, of certain physical, mental and moral tendencies which differ from the accepted standards of society as a whole. Whether a man is dark or light, is of no consequence as compared to whether he carries with him tubercle bacilli or has trachoma. Whether a woman can pronounce th or z plainly or not, is a very minor point in comparison with her adaptability to decent domestic life on the one hand or prostitution or vagabondage on the other. The flag under which a child has been born in Europe plays no such part as the life to which his forebears have been accustomed for the last five hundred years.

Now it is precisely the physical, mental and moral attributes of the immigrant to which the U. S. Government does pay attention. Once accepted as a citizen or even a permanent resident of the United States, the duty and the self interest of every recent immigrant are precisely the same as for the man who is American for a dozen generations. To demand, as an Italian, or Jew, or Englishman or any other national or racial designation, that undesirable members of the same race be admitted is just as wise

as for a newly admitted member of a club or business company to demand that every one else on his street be admitted.

What we want in this country is not the admission nor the exclusion of any particular sub-race, but the admission of the best stock, of any and every nationality, best physically, mentally and morally.

The Corning Typhoid Epidemic

THROUGH the courtesy of Dr. Frank S. Swain, Health Officer of Corning, we are able to present a timely report on the epidemic in progress in that city. Bearing in mind how busy he is at this time, with both private and public duties of an urgent nature, our readers will appreciate this courtesy the more.

The comparative mildness of the epidemic in connection with the fact that there was a precursory epidemic immediately following the contamination of the water, may have great significance in regard to the mutual relations of colon and typhoid bacilli, especially as to a protective influence of one infection upon another.

What we wish to emphasize most, however, is the hopefulness with which such problems can now be dealt as contrasted with the time, scarcely a generation distant, when such an epidemic was still regarded as a visitation of Providence by a large share of the community and when the most learned and expert were powerless to prevent further progress or even to draw lessons for the future.

In a sense, such an epidemic is more truly a visitation of Providence now than formerly. It is a logical and, in the long run, inevitable consequence of a risk which, in the present case can apparently be definitely traced. The daily press of Corning which gives loyal and intelligent support to the work of relief and prophylaxis, goes so far as to ascribe the epidemic directly to the fact that the closure of a valve was neglected in what is normally the outlet of the reservoir but which became an inlet during the stage of high water in the river. In these days, every community knows or can know exactly what to do to prevent typhoid. The practical problem differs for different communities; there are more or less perfect solutions, often involving great differences in expense which must be considered. But, must each community delay the solution of the problem till its own punishment for neglect comes upon it? The following press dispatch is a partial answer:

The city of Hornell has been directed by Dr. Eugene H. Porter, state commissioner of health, to show cause before him

on June 20th, why action should not be directed against that municipality for polluting the Canisteo river through its system of sewage.

Complaint was also made against the cities of Elmira and Corning, but they have agreed to install new sewage disposal plants.

Professional Ethics

THE confession of deliberate murder of a supernumerary fiancée by the Rev. Mr. Richeson, the implication of an entire family in the disgrace, without blame on their part, the hint of other social tragedies stopping short of murder, the final step by which the community rids itself of a dangerous member, make a sad story, on whose obvious morals, we need not dwell.

A medical journal may, however, be pardoned for calling attention to the wisdom of maintaining, not merely ideals of personal and professional ethics, but a definite system of codification of ethical principles, of censorship of professional conduct and of applying this system in such a way as to prevent, if possible, extreme results of carelessness, temptation and wrong individual proclivities. We can all call to mind physicians of good standing and of useful and honorable careers, who have been kept to professional standards and who have been saved from permanent lapses, by the prompt, perhaps severe, action of this system. Essentially the same system is carried out in the great churches, while in many other denominations, the individual clergyman is left almost wholly to his own guidance until a catastrophe has occurred. In these days when the influence of than many upright clergymen can counteract by whole lives of precept and good example. In the law and other professions we find, of course, punitive methods but no such elaborate, constantly guiding system of ethics as that for whose maintenance the medical profession is so often ridiculed.

Announcements

Foreign Editors. We expect, beginning with the new volume of the JOURNAL, to add a list of editors for several foreign countries. We have already secured the acceptance of Sir William Osler of Oxford, Eng., and of Professor Dr. P. K. Pel, of Amsterdam, Holland. It is obvious that these and the other gentlemen whom we expect to join our staff, cannot devote their time to routine work on the JOURNAL. They will, however, contribute articles from time to time and will inform our readers

of important movements in medical circles in their respective countries.

Original Articles to be Expected. Dr. Ludwig Hektoen of Chicago will publish the lectures delivered in the Harrington course, at the University of Buffalo, in this JOURNAL. The series will probably be divided so as to be printed in the July, August and September issues.

Dr. Louis Faugeres Bishop of New York; The Pulse and its Observation by Nurses.

Dr. George Foy, Dublin; Caesarian Section.

Dr. Anthony Bassler, New York; Medical vs. Surgical Means of Diagnosis and Treatment of Gastro-Intestinal Diseases.

Dr. Thew Wright, Buffalo; Compound Fractures.

Dr. Edith R. Hatch, Buffalo; Acute Pyelitis in Infancy.

OUR CONTEMPORARIES

THE *Buffalo Commercial* has recently published an interesting article describing how the city refuse is disposed of. Waste paper alone amounts to 22 tons a day, worth \$10.00 per ton. Broken glass is re-melted. About 2,000 unbroken bottles and 300 milk bottles are saved daily. The last are sold to the original owners at one cent each. It is some comfort to know that the bottles are sterilized but, for Heaven's sake doctor, smash your urine bottles before throwing them out. .

PRACTICAL *Medicine* of Delhi, Ind., advertises "an ointment which is free from all poisonous substances and is claimed to be very successful in the treatment of all kinds of skin diseases." It is manufactured at Sukkur—and probably sold to Sukkurs.

THE *Homeopathic Envoy* comments as follows on Col. Crego's article:

MEDICAL SCIENCE VS. HOMEOPATHY.—Here is an illustration of why the latter, even in the hands of one not very learned, is better than the other, that is, better for the patient. In a paper on "Meningitis" Dr. F. S. Crego (*Buffalo Medical Journal*, March) writes: "Pachymeningitis externa is a slow inflammation of the external layer of the dura. As you remember" (which probably you do not) "the dura is the periosteum of the internal table of the skull as well as the external covering of the brain. This disease is rather common, and is so frequently mistaken for the other disease that it is well worth while to give it a few moments of consideration." Here follows a very excellent dissertation on the various causes of this ailment. Now, the point

is this: That to acquire this exquisite and enviable skill in diagnosis must take years of hard and patient study. Afterwards when a case is presented and the diagnosis of pachymeningitis made, the question arises, what is to be done? The learned man at this point looks up in a dazed manner and too often in effect replies, "I do not know! I merely study the manifestations of the disease," or else he gives some routine treatment. A good homeopath might never have heard of pachymeningitis externa, yet from the symptoms presented by the patient, he might be able to do what the learned one could not, namely, cure the case.

We were going to say something scurrilous but, after all, do we as a general proposition have to stagger and fall like one with locomotor ataxia, in our treatment, just because we are in the dark as to diagnosis? Really we relieve quite a good many cases but we do not thoroughly understand any.

WE beg leave to call the attention of the *Journal of the A. M. A.* to page 24 of the advertising pages of *Munsey's Magazine* for May, next to frontispiece. Here will be found an advertisement of a medicinal preparation advertised on page 19 of the advertising pages of the *Journal of the A.M.A.* There is an old proverb that people should not let their children throw stones at green houses till their own windows are boarded up for the summer vacation.

PERSONAL

Sir Bertram Dawson, Physician to King George V, recently passed through Buffalo and Niagara Falls, after visiting and studying with the Mayos of Rochester, Minn.

Dr. A. F. Miller of Batavia was thrown against a telegraph pole on May 3, something having gone wrong with the steering gear of his automobile. He sustained no fractures but was badly shaken up.

The second congress of the Italian Alliance will be held in Buffalo, June 18-22. Drs. Charles R. Borzilleri, Joseph Tartaro and Anthony Cetola of Buffalo, are on the local committee.

Dr. Edmund E. Blaauw of Buffalo is spending the summer in Europe.

Dr. John G. Chadwick of Buffalo spent May in California.

Dr. Herman E. Hayd of Buffalo has been spending six weeks in California and other western states.

Dr. L. M. Wilkins of Lackawanna, had his automobile stolen while he was making a professional call in Buffalo. The machine was later recovered at Black Rock but it had been driven hard and was badly damaged.

Dr. F. H. Sutterby of Bath visited in Leroy in May.

Dr. C. H. Thomas of Silver Springs has returned from Pine Bluff, N. C., where he has been spending the winter and spring.

Dr. George W. Pattison of Buffalo has moved to 84 Elmwood Ave.

Dr. Albert W. Palmer of Buffalo has moved to 1525 Seneca St.

Dr. DeLancey Rochester of Buffalo has moved his residence to 54 Ashland Ave., his office remaining at 469 Franklin St.

Dr. Charles Van Bergen of Buffalo, has returned from Paris and will be at home for a brief period.

Dr. Jacob E. Helwig of Martinsville has been re-elected School Commissioner, having held the office continuously for twenty years.

Dr. Charles E. Marshall, formerly of Fredonia, has been appointed Chief of the Dept. of Bacteriology at Amherst College.

Dr. Richard H. Satterlee of Buffalo has been appointed consulting ophthalmologist to the Thomas Indian School at Iroquois, N. Y.

Dr. Allen A. Jones of Buffalo has moved his residence to 487 Delaware Ave.

Dr. Frank C. Streeter has been elected President and Dr. C. F. Hoffman Health Officer of Bolivar, N. Y.

Dr. Walter S. Goodale of Buffalo, Supt. of the Ernest Wende Hospital and of the City Hospital for Contagious Diseases, will reside at the new cottage now being built on the grounds of the latter.

Dr. F. Parke Lewis of Buffalo addressed the graduates of the training school of the Memorial Hospital of Niagara Falls, May 14.

Drs. Earl P. Lothrop and Almon H. Cooke presented diplomas and gave brief addresses at the annual commencement of the training school of the Buffalo Woman's Hospital, May 16, 1912.

Dr. Grover W. Wende of Buffalo attended and presided at the annual meeting of the American Dermatologic Association in St. Louis, late in May.

Dr. David A. Gorton of Brooklyn, aged 80, is the father of twins, a boy and a girl. He is a vegetarian as well as an octogenarian.

Dr. S. A. Dunham of Buffalo, was a delegate to the Presbyterian convention at Louisville, in May.

Dr. Henry T. Williams and Dr. Charles R. Barber have both been appointed to the Park Board of the City of Rochester.

Dr. J. R. Williams of Rochester is in Europe.

Dr. Edward A. French, Rochester, has removed his office from Andrews Street to 209 Alexander Street, corner Monroe Avenue, being in the same house with his brother Dr. Robert T. French.

Dr. George G. Carroll, Rochester, has returned from a two years' residence in Vienna where he has been engaged in the study of eye, ear, nose and throat diseases.

Dr. Donald F. Macdonell has removed to 919 Hudson avenue, Rochester.

Dr. Peter C. Guinan, Rochester, has recovered from his recent illness.

Dr. George W. Goler, Dr. Edward Wheelock and Dr. C. R. Sumner are the physicians of Rochester mentioned in the new Who's Who in America for 1912.

OBITUARY

Dr. Charles Francis Clowe of Schenectady, died April 29, 1912, aged 46. He was a graduate of Albany, 1888.

Dr. Levi E. Horton of Avoca, N. Y., died April 22, 1912, aged 67. He was a graduate of N. Y. Eclectic, 1891.

Dr. Julius Wenz of Lancaster, N. Y., died April 25, 1912, aged 68. He was a graduate of Buffalo, 1865.

Dr. William J. Whitford of Schenectady, N. Y., died April 19, aged 55. He was a graduate of Vermont, 1889.

Dr. Charles W. Nichols of Whitesboro died April 23, 1912, of cerebral haemorrhage, aged 62. He was a graduate of Albany, 1889. He was a Civil War veteran and, for several years was health officer of Fairfield.

Dr. George H. Reynolds, formerly of Delhi, N. Y., died in Niwot, Col., March 21, 1912, of tuberculosis. He was a graduate of Albany, 1891, and was 46 years old.

Dr. Daniel Kimball Pearsons, has recently died in Chicago at the age of 92. He gave up the use of tobacco a year ago, too late to prevent its deleterious influence in shortening life. He began the practice of medicine 70 years ago but as he gave away, in all five million dollars to philanthropy, it is scarcely necessary to state that he did not continue his active professional life but made a fortune buying and selling Illinois farm lands. One peculiarity regarding his gifts which does not seem to have struck any of the numerous press writers, is that his gifts were largely to educational institutions but that he gave nothing to the cause of medical training.

Dr. Eugene B. Horton, City Bacteriologist of Niagara Falls, died May 6, 1912, at the Buffalo General Hospital, of cerebro-spinal meningitis, aged 39. He was a graduate of Buffalo, 1902.

Dr. William S. Cheesman of Auburn, died May 7, 1912, aged 60 years. Born in Brooklyn, February 10, 1853, he prepared for college in the Brooklyn Polytechnic Institute and entered Prince-

ton in 1871. He graduated in 1875, and four years later graduated from the Columbia College of Physicians and Surgeons, at the head of his class. He located in Auburn in 1881 and resided there continuously.

He was a member of the American Medical Association, the Medical Societies of the State of New York, Cayuga county and city of Auburn. At one time he was president of the Central New York Medical Association, a member of the Syracuse Academy of Medicine, Fellow of the New York Academy of Medicine, and had recently been appointed to the Committee on Experimental Medicine, of the New York State Medical Society. His contributions to medical publications were numerous and meritorious. The deceased had been ill for a long time with nervous complications.

BOOKS AND AUTHORS

The Care of the Insane and Hospital Management. Charles Whitney Page, M.D., Supt. Danvers State Hospital, Danvers, Mass. Published by W. M. Leonard, Boston. 155 pages, \$1.00.

Tactfully but very candidly, the selection of internes, promotion of assistants, management of nurses, attendants and trustees and various similar delicate topics, are discussed. Non-restraint is the key note of the various scattered sections dealing with the direct care of the patients. The book is scarcely at all technical and should appeal to sociologists, persons engaged in philanthropic work and those unfortunate enough to have an insane relative, as well as to those professionally interested in medicine.

A Manual of Clinical Chemistry, Microscopy and Bacteriology. Drs. M. Klopstock and A. Kowarsky of Berlin. Authorized, anonymous, translation. Rebman Co., 1123 Broadway, New York. 375 pages, 43 figures and 16 colored plates, \$3.00.

This is a well arranged, concise presentation of the subject, designed as a guide to laboratory work, especially by men not too well trained.

The Treatment of Short Sight. Prof. Dr. J. Hirschberg, Berlin, translated by Dr. G. Lindsay Johnson, Johannesburg. Published by the Rebman Co., New York. 123 pages, 13 illustrations.

While brief and mainly concerned with the operation for the restoration of the eye to its normal length, the author enters somewhat into historic study of myopia, its prevalence, prevention and hygienic treatment. The geometry of myopia is discussed quite technically. The results of operation are tabulated and the author speaks conservatively and with a warning note, against rash operation. This is an epoch-making book.

The Immediate Care of the Injured. By **Albert S. Morrow, M.D.**, Adjunct Professor of Surgery in the New York Polyclinic. Second Edition, Revised. Octavo of 354 pages, with 242 illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$2.50 net.

Part I consists in a rudimentary treatise on Anatomy and Physiology, approximately corresponding to a high school course. Part II describes bandages, dressings, antiseptics, medicaments, etc. Part III deals seriatim with various accidents and emergencies. The author has undertaken a difficult and thankless task, in preparing a work which shall prevent harm from lay ignorance and render the layman a competent but not officious assistant to or fore-runner of the physician and surgeon. It seems to us that Dr. Morrow has performed this task with great skill.

Differential Diagnosis. Presented through an Analysis of 385 cases. By **Richard C. Cabot, M.D.**, Assistant Professor of Clinical Medical, Harvard Medical School. Second Edition. Octavo of 764 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$5.50 net.

Dr. Cabot has reversed the customary method of classification according to disease and very wisely since, if one knows what disease to look under, his differential diagnosis is already made. He has also gone contrary to modern precedent in classifying according to symptoms rather than physical, chemic and other methods of investigation. In so doing, he has followed the order in which cases naturally appear. More than half the book comes under the diagnostic heading of PAIN, variously sub-divided: Fevers, Chills, Haematuria, Dyspnoea, Jaundice and Nervousness follow. The charts suggest Butler's and the arrangement of the work the Case History Series, a comparison which is in no way odious, and in no way derogatory to the originality of the work.

Report of the Commissioner of Education, for the year ended June 30, 1911. Vol. I. Printed by the Government, Washington, D. C. 1912.

This is a most interesting report on general education but does not enter into statistics of medical education.

New and Non-Official Remedies, 1912. Published by the A.M.A., Chicago, 1912. 50 cents cloth, 25 cents paper covers. 298 pages including index.

There has been so much discussion as to the general plan and methods of the Council on Pharmacy and Chemistry, and the material contained in this book has been scanned weekly by so many, that we need say little regarding this work. It is of the utmost value, and the Council deserve the highest commenda-

tion for their labors. That they should, in every detail, reach the same conclusions as any given critic is manifestly impossible and we trust that all, however interested, will maintain a fair attitude toward both sides in any particular controversy.

The Prevention of Dental Caries, J. Sim Wallace, D.Sc., M.D., L.D.S. London, published by **The Dental Record**, Alston House, New-man St., W., London, 1912. 70 pages, a few illustrations, 1½ shillings.

We trust we may be pardoned for expressing the price in an American idiom. This is a very thorough and concise treatise, recognizing, of course, the essential role of bacteria in causing caries, and with recognition of Miller's work in dental bacteriology, but taking up practical means of prophylaxis in a highly original manner. The tooth brush, tooth powders and antiseptic washes are considered rather cosmetic than prophylactic of caries. Much stress is laid on the foods favoring and tending to prevent decay, the general principle being that any sticky, soft food, not requiring mastication and liable to remain in contact with the teeth is harmful, while fibrous, detergent masses, requiring mastication tend to prevent decay. Sugar, candy, farinaceous foods, starchy foods with milk or in the form of puddings belong in the former category while meats, vegetables, especially raw, fruits, toast or bread stuffs with a fibrous consistence, fatty foods and liquids, except chocolate, belong in the latter.

Compendium of Diseases of the Skin, based on an analysis of 30,000 consecutive cases, with a therapeutic formula. L. Duncan Bulkley, A.M., M.D., New York. Published by Paul B. Hober, 69 E. 59th St., New York, fifth revised edition of the **Manual of Diseases of the Skin**; cloth, 8 vo., 300 pages, \$2.00 postpaid.

When a specialist of long experience and sound education, general as well as in direct preparation for his occupation, bases his work on 30,000 tabulated cases, and condenses his observations into 300 pages of coarse print, the result is obviously practical. To use a homely figure, Dr. Bulkley shows his hand; there is no chance for a bluff. The 30,000 cases are equally divided between private and charity cases and, in each series, the sexes are approximately equal. Hence, conclusions as to sexual and social differences of incidence, course, etc., are reliable. An examination of the hand that Dr. Bulkley has thrown on the table confirms the *prima facie* favorable opinion. There are about the normal number of exanthematous cases to be expected in dermatologic practice from consultations regarding puzzling and atypic appearances—less than a hundred altogether. Many dermatologists frankly and, therefore, properly, include venereal

diseases but in this list, we find no gonorrhoea, only 13 cases of chancroid in 15,000 private cases, though nearly 400 in the charity cases, even syphilis is represented by only 1,000 private and 2,000 charity cases. Similar statements might be made as to various other border-line diseases. Another favorable sign, is the actual rarity of rare diseases; the reader feels certain that there is no manufactured evidence. The same evidence of veracity is shown in the opposite way by the fact that five common diseases—the only ones whose grand totals run above a thousand—comprise 18,700 of the 30,000 cases. These are acne, dermatitis, eczema, psoriasis and syphilis.

Hand-Book of the Anglo-American Medical Association of Berlin.

This association of English-speaking medical students, in Berlin, has permanent quarters in the Hotel Atlas, 105 Friedrich Strasse. The hand book contains all sorts of information as to lecture courses and all physicians expecting to study in Berlin, would do well to apply for membership. Among the members from November 30, 1910, to January 1, 1912, we note those of C. S. Bentz, J. L. Eckel, and J. C. Roberts of Buffalo, C. E. Rynd of Westfield, R. A. Vose of Ithaca, W. H. Boynton of Brewster.

Text Book of Ophthalmology, in the form of clinical lectures, Dr. Paul Roemer, Greifswald; translated by Dr. M. L. Foster; published by the Rehman Co. of New York. 186 illustrations, 13 colored plates, cloth, 3 volumes, \$2.50 each.

Volume I, contains 275 large pages, dealing with the methods of examining the anterior segment of the eye, and the diseases of the conjunctiva and cornea, iris and lens. What impresses the reviewer is the sustained effort at clear description and at practical application of scientific facts.

The New Pocket Medical Formulary with an Appendix containing Formulae and Doses for Hypodermic Medication; Posologic Table; Fractures, Dislocations and Sprains, Ligations of Arteries; Hemorrhages and Wounds; Poisons and Antidotes; Miscellaneous Emergencies; Tables of Differential Diagnosis, Diet Lists for Various Diseases; Formulae for Fluid Foods, etc., by William Edward Fitch, M.D., N. Y. City. F. A. Davis Co., Phila. 474 pages, \$2.00.

This is a most valuable little companion, well worth the price in spite of the small size. The only unfavorable criticism that occurs to us is that the author, like many others, fails to realize that there is absolutely no use in employing the metric system

as a literal translation of an apothecaries' formula. For instance, instead of

R	Hydrarg. ammoniat	3.9
	Cerati simplicis	31.10

which uses inconvenient amounts and affords no idea of strength, one should translate freely and idiomatically, somewhat as follows:

R	Hydrarg. ammoniat	2.50
	Cerati simplicis	20.00

which indicates an 8 per cent. ointment. Similarly, in the liquid formulae which are worse yet and tend too much toward polypharmacy, total bulk should be brought to 100 or some such even quantity, and doses reckoned smoothly as multiples of 5 C.C., the teaspoonful. As in apothecaries' formulae, the teaspoonful is usually estimated at a drachm, which is incorrect, the quantities in the two contrasted formulae will, evidently not correspond either exactly or proportionately.

Immunity. Dr. Julius Citron, Berlin; translated by A. L. Garbat, M.D., New York. Published by P. Blakiston's Son & Co., Philadelphia. 209 pages, 27 illustrations, 2 colored plates, 8 charts. \$3.00.

This is a book for study rather than review, as it would be unjust to the author and inadequate for the reader, to select passages at random. The long list of authors indicates the care with which the material has been collated. Very little space is given to abstract discussions of theory yet it would scarcely be correct to say that information of theory is presupposed for, very briefly, and with the attitude of one thoroughly familiar with the practical side of the question, explanations are interpolated so as to afford an intelligent basis for the consideration of experiments and clinical tests.

A Surgical Treatment of Locomotor Ataxia. By L. N. Denslow, M.D.; Bailliere, Tindall & Co., London, 1912, 12 mo., p.p. 118.

A very recent small work from the pen of a well known recent American scholar, with the above title, has just appeared in attractive form, with still more attractive subject matter. Men who have lived during the past generation as well as the present will well remember the unmistakable views enunciated by the late Dr. Fessenden Otis regarding strictures of large calibre, constrictions of the meatus, and the great variety of reflexes which might emanate from the urethra involved in either of these conditions. The application of the Otis dicta to the conditions

summed up under the general name of locomotor ataxia is not necessarily new save to recent students, but in this concrete form will serve as a reminder of a matter now too generally forgotten in the hurry and haste with which opinions chase each other in recent times. Dr. Denslow has done a great service by connecting up the phenomena of the latter condition with the pathology of the urethra as enunciated by Otis. It will not do to say that urethral conditions are the secret mainspring of all spinal scleroses, or other lesions, but the fact remains that men have become oblivious to the diversified reflexes of urethral origin. Otis was distinct and unmistakable in his teachings. Their value was probably never fully appreciated, and is today generally forgotten. The gist of this very valuable little book consists in this, that after a brief summary of the clinical features and the pathologic conditions met with in many cases of locomotor ataxia, it is shown how many of them may be, and probably are due to previously underlying and, perhaps, forgotten urethral lesions. Behind all this matter is a principle of the greatest value, i.e., not alone the clinical features of ataxy may be due to such local disturbances but many others which the author does not attempt to consider. To one who has followed, in time past, the teachings of Otis, and who well remembers the controversy between himself and the late Dr. Sands, this book will induce a revival of interest and a collection of reminiscences of really great and enduring importance. It is Denslow's especial intent to show how often those lesions generally comprehended and included under the term "locomotor ataxia" may be distinctly ascribed to a direct relation to narrowings somewhere in the urethral canal. In view of what has been known and partly forgotten and, especially, in view of that of which sight should never be lost, his suggestions as to careful examination of the urethra in order to note its varying diameters or calibres, and to remedy all faults of the latter, are of the greatest clinical import and importance. The reviewer, therefore, considers this little book of Dr. Denslow's as an exceedingly valuable contribution to the therapy and consideration of a disease hitherto too generally considered progressive, unpromising, and usually helpless, and he sides entirely with the author in urging systematic investigation, in this direction, of every patient suffering from any spinal malady which can, or even perhaps cannot be, grouped under the general title. The brochure is well worthy of careful reading, and its suggestions well worth carefully trying, as offering greater promise of helpfulness than has yet been afforded from any other method of treatment.

R. P.

Surgery of Deformities of the Face, Dr. John B. Roberts, Philadelphia. New York, Wm. Wood & Co., 273 pages, 273 illustrations, \$3.00

The development of plastic surgery, the removal of gun powder, tattoo marks, etc., disfiguring skin diseases, and the discussion of peculiar cases, methods of grafting, etc., are among the noteworthy portions of the book since we expect the thorough discussion of hare lip, cleft palate, syphilitic deformities, etc. No surgeon can afford to be without this work.

Modern Methods in Nursing. By Georgiana J. Sanders, formerly Superintendent of Nurses at the Massachusetts General Hospital, Boston. 12mo of 881 pages, with 228 illustrations. Philadelphia and London: W. B. Saunders Company, 1912. Cloth, \$2.50 net.

A most excellent book. The only criticism that we can offer is to recur to the general problem of how far it is desirable and safe to instruct nurses in methods of diagnosis, especially those involving technicalities of chemistry and bacteriology. We can not help feeling that it is unreasonable to include such subjects in the nursing curriculum and that, unless they can be gone into thoroughly, "a little knowledge is a dangerous thing." In short, it is a question of drawing the line between the nurse and the physician.

CORRESPONDENCE

Arizpe, Sonora, Mex., May 4, 1912.

Buffalo Medical Journal, Buffalo, N. Y.

Dear Dr.—I don't expect that this will interest you much but I wish to protest in the columns of your journal against the false statements of the U. S. press in regard to our trouble here in Mexico, especially here in Sonora.

I have lived in Mexico now for over a year and have always been treated with courtesy by the Mexican people, both rebels and federals. I have met and talked with Americans from all over the republic, even from the danger zone in Chihuahua and the lower states and each and every one of them reports that he has been treated kindly by the Mexican people and brands the border press as falsifiers.

We will take the state of Sonora as a whole and there are not over thirty so-called revolutionists and it is only a matter of a few days till they will be captured. The Yaqui Indians are loyal to the government to a man and all reports to the contrary are false.

Madero has made an able executive and if the U. S. press, especially the border press, would confine itself to the truth it would only be a few weeks till we would have peace all over the republic.

Yours respectfully,

DR. J. M. HIGGINS.

MISCELLANY

Coffee Imports of the United States and Share of World's Consumption

More than one-third of the 21-2 billion pounds of coffee annually entering the international commerce of the world is consumed in the United States, its imports of that article being twice as much as those of Germany, three times those of Netherlands, four times those of France, nearly ten times those of Great Britain, and half as much as those of all Europe, next to the United States the great coffee-consuming section of the world.

The world's leading importers of coffee, according to the latest official reports of the various countries thus far received by the Bureau of Statistics, Department of Commerce and Labor, are: the United States, 875 million pounds; Germany, 404 million; Netherlands, 265 million; France, 245 million; Austria-Hungary, 127 million; Belgium, 95 million; the United Kingdom, 88 million; and Sweden, 65 million. Italy, Norway, Switzerland and Denmark also consume considerable quantities, ranging from 45 to 25 million pounds each. Of the countries on the western hemisphere, Argentine and Cuba each import about 20 million pounds per annum; Canada, about 8 million; Chile, 7 million, and Uruguay about 3 million, while Australia, the island continent, consumes between 11-2 and 2 million pounds per annum. Certain of the African countries are comparatively large importers of coffee, the imports into Egypt averaging about 15 million pounds a year; the Cape of Good Hope, 20 million, and Algeria, about 15 million pounds.

While the United States is the world's largest consumer of coffee, the imports have not increased during recent years. In the fiscal year 1902, for example, the imports aggregated 1,091 million pounds; in 1905, 1,048 million; in 1909, 1,050 million; in 1911, 875 million; and in the present year will probably aggregate approximately 800 million pounds, or considerably less than the annual average of the period since 1900. In 1871 imports of coffee amounted to 318 million pounds; in 1881, 455 million; in 1891, 520 million; in 1901, 855 million; and in 1911, 875 million. Cocoa has to a large extent supplanted coffee as an American beverage, the imports having increased from 31-2 million pounds in 1871 to over 140 million pounds in 1911.

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Acute Pyelitis in Infancy

By DR. EDITH R. HATCH,
2565 Main Street, Buffalo

THE present day literature abounds with contributions on diagnoses or urinary disorders with cytoscopy and ureteral catheterization. The majority of general practitioners must needs barely glance at the titles of these lengthy articles as time forbears of their reading. Also, one feels that much therein stated is possible only for the specialist to carry out.

It is not with the idea of bringing forth anything new on this subject that this paper is presented but rather to emphasize and urge better recognition of *one* urinary disturbance which comes to the general practitioner, and the diagnosis of which necessitates of no new or special mechanism. In selecting the subject Acute Pyelitis of Infancy the writer purposely avoided substitution of the word childhood for infancy, having in mind the babe under two years of age—the age when, unless the diagnosis be that of marasmus or intestinal disturbance, the physician often mentally agrees with the worried mother that “it is so hard to tell what is the trouble with a baby for he can’t talk.”

Just as the general practitioner cannot carry out all the new mechanical devices and intricate laboratory tests neither can he read all the journals—he must principally rely upon text books of general diagnosis with a few selected ones on special subjects. Therefore, in the average library there will probably be found very little space or accurate information upon this subject.

In the 1896 edition of Ashley and Wright's Diseases of Children there is this paragraph: “Acute Pyelitis is certainly not a common disease in infants or children. We have however several cases of acute illness in infants or young children accompanied by a high temperature of an intermittent type and after the attack lasted several days it has been noted that the urine contained pus—the nurse having called attention to the fact that there was something unusual in the way the urine stained the diapers. Dr. S. J. Gee has recorded a similar case in an infant of 9 months. Dr. Emmett Holt records three such cases in infants of 8, 9 and 14 months.”

Dr. Holt's 1897 edition takes up at some length the definition, etiology, lesions, symptoms, diagnosis, prognosis and treatment of pyelitis, considering it as a secondary affection but mentioning these same three cases in which it was apparently a primary affection. Jacobi, Rotch, Still, Morse and Koplic at this same period and for some time later refer to it as a very rare malady. In fact the first case reported by Escherich was not until 1894.

Holt no longer counts the number of cases seen, and in fact all the writers at the present time are united in the opinion that acute pyelitis, or inflammation of the mucous membrane lining the pelvis of the kidney, is *not* a rare disease. This consensus of opinion among pediatricists is quite in contrast to the diversion of opinions still waging concerning other problems as for instance infant feeding.

Let us first consider the clinical picture of this complaint from an actual typical case. D. B., girl, 8 months old, previously well, bottle fed with modified cow's milk. Mother thought child unduly hot and herself took the temperature at 5 P. M. and it was 105 by rectum. When seen a few hours later this was confirmed. Of course the symptoms are objective in patients of this age. There was no history of vomiting but food had not been taken as well as usual; no diarrhoea; no suppression of the urine. Physical examination of the chest and abdomen showed nothing abnormal—no distension of abdomen or tenderness over kidneys or bladder. There was no redness of the tympanic membrane or tenderness over mastoid region. The mother had already given calomel which was followed with milk of magnesia. The child was quickly gotten into a profuse perspiration and temperature fell to 101 before midnight. The next morning it was still 101 but reached 103 in the afternoon. This irregularity ranged from 100 to 105.4 for eight days, the child looking decidedly ill, pale and frequently refusing food. At no time was there vomiting, painful or frequent urination, but for the first few days the urine was thought to be somewhat scanty. While the usual suspicion would be of an intestinal derangement at no time would an examination of the stools have confirmed it. A sample of urine was collected the first night and found to be cloudy, acid reaction, specific gravity 1010, slight trace of albumin, pus cells in quantity, no casts or red blood cells. Diagnosis acute pyelitis and treatment as hereinafter mentioned. The temperature fell to normal in 8 days. Iron was given for the subsequent anemia and there has been no recurrence in the last year and a half.

We may ask what in the foregoing may be considered significant of pyelitis—nothing, excepting to be suspicious. In any obscure irregular temperature *always* examine the urine and ears.

If diagnosis still remains obscure of course the blood should be examined for typhoid and malaria. However, the *urinary* findings *are* most significant—acid reaction, low specific gravity, none of slight trace of albumin, microscopically many pus cells, singly and in clumps, the amount of the albumin present being only in proportion to the pus, epithelial cells and occasionally a red blood cell. The pus will vary in amount which is the reason for examining more than one sample if the first ones be clear.

While chills are so pronounced in older people they are rarely seen in infants or at least much less severe.

Failure in diagnosis is often probably due to the idea that it is so difficult to collect urine from an infant. While in the boy it is comparatively easy with a large test tube or wide mouth bottle held with adhesive straps it seems much more difficult with the girl. There are several special devices for the girl, but after they are all tried this same wide mouth bottle will be found as satisfactory as any, and with a little extra watchfulness an uncontaminated sample can be promptly obtained. About the neck of the bottle buttonhole a piece of adhesive having a slit in the posterior part—one tail for each buttock. This can be fitted on closely and held in place by the diaper. Supporting the buttocks on a pillow also aids. To wait for the chance of obtaining sample by passing in a vessel generally means delay of several hours or utter failure unless the child has already been trained for its use. If the family is absolutely unable to manage this a catheterized specimen should be obtained, which is especially easy in girls.

Happily these babes are already on fairly good treatment in spite of no diagnosis or an incorrect one as they are milk fed and probably given extra water because of the fever. Also, they seldom prove fatal. They either recover spontaneously or become chronic. The treatment consists of milk diet with plenty of water and alkalies. 15 to 25 grains of potassium citrate or ammonium acetate should be given in 24 hours to a year old babe. While this is generally sufficient urotropin apparently hastens recovery. If the case does not respond an autogenous vaccine should be used before it becomes chronic.

Eighty per cent or more of the cases occur in girl babies. Because of this and because the colon bacillus is usually found as the germ it appears likely that it is an ascending infection. Mothers and nurses should be instructed to cleanse the napkin parts with cleans pieces of cotton, never wiping *forward* over the perineum. As the virulence of the colon bacillus is markedly increased in diarrhoea and other intestinal diseases special precaution should then be exercised as it is sometimes secondary to diarrhoea.

The majority of the books state that the colon bacillus does not produce leucocytosis but the white count in these cases frequently runs as high as 15-18,000.

It is interesting to note that these cases are not associated with vulvo-vaginitis and that the mucous membrane of the urinary tract of an infant seems to resist the gonococcus better than the colon.

So unusual is it to find primary pyelitis in males that the following case is cited. E. A., boy, colored, 9 months, breast fed, obscure irregular temperature for a week. Urine was slightly cloudy, acid, no albumin, no pus but even a catheterized sample swarmed with bacteria. The urine was frequently examined expecting pus might appear. The ears were never inflamed. Because the patient was a boy it was thought *probable* that it was *not* pyelitis but the urine was cultured, and in the meantime the blood was often examined. The white count ran about 7,000, no malarial organisms, and typhoid was negative until the tenth day when there was agglutination and the disease ran a typical course, impressing upon one that obscure, high and irregular temperature with bacilluria is not sufficient to establish a diagnosis of acute primary pyelitis—that the urinary findings *must* include pus cells, and that infants are liable to infections such as typhoid, although rare.

2620 MAIN STREET.

Facts Concerning Physical Condition of Women During College Life¹

By ESTHER E. PARKER, M.D.,

Physical Examiner and Medical Adviser of Women of Cornell University
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Unfortunately, the statistics I have to present to you today are fragmentary. Although I wrote for data to thirty universities and colleges, I received replies from about ten. In many cases, statistics were not compiled, but valuable observations, which are often more reliable than statistics, were sent.

THE office of Medical Adviser, as distinct from that of Physical Examiner, for women at Cornell University has been inaugurated this year. For two years such provision has been made for the men.

In my capacity as Medical Adviser, I have come in close contact with the women, holding, as I do, office hours at the University each day and issuing all their excuses for absences.

I was first surprised at the large number who reported dys-

¹ Read before Women's Medical Society of New York State at its 6th Annual Meeting in Buffalo, May 16, 1912.

This is not statistical but an observation by the gymnasium instructor.

Northwestern:

Irregularities few.

Dysmenorrhoea, not serious.

Amenorrhoea, 2 or 3 out of 180-200.

Wells College:

Majority regular.

Dysmenorrhoea few.

Amenorrhoea few.

Syracuse University:

"Medical examinations of all entering girls show general dysmenorrhoea, which gradually disappears during the first year of college. I find then a tendency toward monorrhagia and the menses occurring every three weeks. There have been but few cases of amenorrhoea. There are, however, two cases in college at present, both attending special classes in the gymnasium. The menses in one case occurred before the end of the freshman year and the other in the senior year. Both girls are in good health. There are a few cases of irregularity the periods occurring every five or six weeks. These girls are in a special outdoor walking class."

The replies to the question regarding "nervous disturbances," were very satisfactory in that so few are found. At Tulane University, an exception is found and Miss Baer writes:

Anorexia, small percentage.

Insomnia, small percentage.

General nervous temperament, large percentage.

Examinations are the dragons causing insomnia, and in the spring anorexia is most prevalent.

When I spoke to Dr. Tinker, who has done such splendid work on goitres, about the astonishingly large number found among the entering women this year, he said he felt sure that it was not that goitre is more common but that it is being noticed more and more. Out of 184 cases examined, I found 27 that I feel sure of and 7 doubtful ones.

From Western Reserve, Miss May writes the "number of cases is appalling."

At Smith there are 53 out of 892.

At Mt. Holyoke, 3 per cent.

At Brown 1 case (out of 50?)

At Radcliffe, 9 out of 401.

At Northwestern, about 20.

At the University of Indiana, 10-15 out of 250.

At Wells, 3 cases.

At Syracuse University, 1909, 11 out of 301; 1910, 1 out of 313; 1911, 4 out of 307.

At Tulane University, very rare.

At University of Illinois, no statistics, occasional cases.

Have you heard the small boy's excuse for not washing his back sufficiently often? When his mother questioned him closely about it he admitted a lack of attention to this part of his anatomy with the convincing remark "you know, mother, I don't use it much." The backs I have seen this year prove beyond a doubt how very much and how poorly they are used. If we could induce mothers not to corset their daughters so early, and to be more careful about the size of the heels on their shoes; if we could influence school superintendents to have school desks adjustable to the size of the student and properly lighted; and if growing muscles were given freedom of movement instead of being trained to keep still, we could then hope to reduce the number of spinal curvatures, which is far too large.

More than one-third of the women I examined last fall showed curvatures varying from slight to marked cases. The fact that they are, for the most part, postural, does not make them any the less a deformity.

From Western Reserve, Miss May writes optimistically: "The spinal curvatures are noticeably decreasing in numbers, owing to the fact, I feel sure, that physical training is better taught and taught in more preparatory schools than ten years ago. The serious cases are few."

M. Holyoke reports 20-25 per cent.

Brown reports 14 out of 15 freshmen.

Radcliffe reports 20 per cent.

Northwestern reports not uncommon.

University of Indiana reports 70 per cent.

Wells reports about 33 1-3 per cent.

Syracuse reports 37 out of 301 in 1909.

Oberlin, Dr. Hanna reports: Scoliosis, 58 3-7 per cent; Kyphosis, 16 2-3 per cent; Lordosis, 4 2-27 per cent; faulty posture, 5 25-27 per cent.

Tulane University reports 85-90 per cent.

University of Illinois reports 51 per cent.

The statistics for weak arches and flat foot are:

Cornell, a little more than 10 per cent have weak ankles or flat foot.

menorrhoea; many were obliged to remain in bed an entire day, more but half a day, and a few for two days. Realizing that there was a large number of women who were not asking for excuses, and desiring to find out more about the effect college was having upon menstruation, I called a mass meeting and asked the girls to fill out cards for me. In a busy university community, where the demands upon a student's time are so many and so varied, it is almost impossible to arrange a meeting when a large majority of the students can attend. I was able, however, to get these cards filled out by 243 women. The usual questions concerning menstruation were asked, i. e., age at which established, regularity, details if irregular, amount, duration, pain; detail as to location, severity, character; other symptoms, headache, nervousness, nausea, etc. In addition, I asked that they make special note of any difference observed during college term and summer vacation; whether they gained or lost weight in college and whether or not they wore glasses.

In this way I secured statistics from upper class women of whom we have no records in the gymnasium since their Sophomore year. Gymnasium work is required of all Freshmen and Sophomores, unless they are found unable to take it; histories are taken of entering students and physical examinations made in the fall term of the Freshmen and Sophomore years.

The large majority of our students enter in good condition. Out of 184 examined this fall, I classified 24 in excellent health, 97 good, 48 fair, and 15 poor. Under the heading "poor" I included those showing nervous conditions, markedly defective metabolism, and in one case a serious cardiac lesion and large goitre. It is worthy of note that many of these classified as poor have finished the year in much better condition than some who have been in apparently better health and less nervous.

From the cards which 243 women filled out, I gathered the following data on general weight during the college course: 36 lost; in some cases this loss was the direct result of dieting undertaken with the purpose of losing excess fat, in others the amount lost is reported slight and in several the remark is made "lost weight during college, but general health is better than before, appetite keener and less nervous." A large number of our women live at home or board down town and walk to and from the campus. This necessitates a steady climb no matter from what direction the campus is approached, for, as we sing in our Alma Mater, Cornell is "Far above Cayuga's waters and its waves of blue." Fifty-eight students reported the same weight and 149 gained. The gain was in most cases quite marked, from four to ten pounds, and, in one case, thirty-five.

This is not at all unusual, judging from reports from other universities and colleges.

At Smith, statistics for the end of the year were not yet completed, but out of 892 students examined in the fall, 743 were classified as good or excellent. Dr. Underhill wrote from Mt. Holyoke, that out of 1,141, 93.6 per cent maintained their weight or improved. From Brown University, Dr. Arnold says, "There is a notable loss in the first year." Statistics from Radcliffe show a tendency to increase. At Wells College, where the great majority of the students live in dormitories, Miss Douglass writes "a good majority gain weight and maintain it throughout their four years." At the University of Syracuse, there is a general improvement noticed. Miss Clara Baer, who has charge of the gymnastic work at Tulane University, feels that "so far the general nutrition of the college girl is not so good at the end as at the beginning of the college course. There are a few exceptions to this rule; not enough, however, to feel that the college is as yet fulfilling its mission in securing to the student a more efficient organism as a whole." At the University of Indiana, where the end results are not so good, Dr. Bowers writes "the boarding clubs are abominable and many girls grow disgusted with that fare and resort to trying to exist from a paper bag. They do not get the good and nourishing food they need when doing hard mental work and many are dragged out, bilious, nervous and hysterical at the end of the senior year." Dr. Bowers goes on to say that perhaps much of this is due to injudicious use of sweets, peanuts, etc., and the many indigestible spreads the girls have. Another factor is the whirl of society.

From Western Reserve Miss May writes: I find the demands on a college student living in a city and attending college in that city are much greater than on the student who attends college in a more secluded, quiet place and who has practically only the campus life. Having come here after several years of teaching at Vassar, I was impressed with the fact that I could not expect as much from the students of the college for women, physically, as I had been getting from the students at Vassar. This, I feel, is greatly owing to the strain of long car rides to and from college, home duties and the many social duties besides those necessary in the college life."

To return to Ithaca—I felt very sure before looking over my cards that the percentage of menstrual irregularities was very large, and the figures proved it; 79 out of 243 were irregular. The variations are in one case every 10 days to 6 weeks, in one 6-12 weeks, one 24 to 31 days, several 4-6 months. Frequent menstrua-

tion is almost always traceable to overwork, either physical or mental. Some few students menstruate irregularly during the college year and become regular in the summer, while with others the opposite is true. A few who were irregular before entering college are regular now."*

Of those who menstruate regularly, there seems to be no limit to the length between periods; every 3 weeks, 25 days, 5 weeks, 32 days, 3 months, 50 days, etc. One hundred and thirty have pain which amounts to more than an uncomfortable feeling or general weakness. Of these, 62 have moderate pain, 29 slight and 39 severe; 54 report severe headache, general depression, nausea or backache.

There are two cases in which the menstruation has not yet been established and four cases of temporary amenorrhoea. One student has not menstruated in four and another not in nine months.

Statistics on menstruation, from other colleges are:

Western Reserve:

Menorrhagia, prevalent.
Dysmenorrhoea, noticeable few.
Amenorrhoea, none reported.

Smith College:

130 out of 892, irregular.
41 out of 892, dysmenorrhoea.
68 out of 892, amenorrhoea.

Mt. Holyoke:

Out of 1,141 there are disturbances in 280. Of these
56.4 per cent improved.
41.4 per cent about same.
2.2 per cent grew worse.
Amenorrhoea, about $\frac{5}{8}$ per cent freshmen.

Brown University:

Almost no cases of Dysmenorrhoea.
Amenorrhoea, few temporary cases.

Radcliffe:

Out of 401:
6, too profuse.
6, too frequent.
3, Dysmenorrhoea severe.

*Not enough figures for statistics.

Western Reserve, "many weak ankles, few flat feet."

Smith, no statistics.

Mt. Holyoke, 20 per cent.

Brown, rather common.

Radcliffe, comparatively few flat feet, many weak feet.

University of Indiana, 75-77 per cent.

Wells College, 6 not bad.

Oberlin, 64 4-9 per cent.

Tulane, 20 per cent.

University of Illinois, about 75 per cent.

Defective vision is so universal that statistics only repeat the well known fact. Out of 89 cases examined, I found 71 with defects. Statistics from other universities are:

Mt. Holyoke, 50 per cent.

Brown, common.

Radcliffe, many cases.

Syracuse, in 1910, 80 out of 305; in 1911, 99 out of 268.

Tulane, 20 per cent.

As to results of gymnasium work, there is not a question of doubt; the universal answer is "improvement." Much attention is being given to corrective work and enthusiasm stimulated by its great success.

Our hope for the future is that thorough courses in physiology and hygiene may be given in the grade, grammar and high schools by physicians who are especially adapted to this work. When we teach our boys and girls a sensible knowledge of their bodies and how to take care of them, then we may hope to find the majority of men and women in our universities and colleges more nearly approaching a perfect type of beauty both physical and mental. The public health movement will surely solve the difficulties of the future by educating the general public to the needs of the coming generation.

We may feel justly proud of our honorary president, whose work along these lines has been so noteworthy.

Suppurative Labyrinthitis

By CHESTER C. COTT, M.D.
Buffalo, N. Y.

ACCORDING to statistics there are two cases of suppurative labyrinthitis to every one hundred of middle ear suppuration. Therefore in a city the size of ours there must be several cases every year. It is only a few years ago that the diagnosis was first made so the classical symptoms of the disease have not reached all physicians. Consequently this disease has, up to

this time, not been commonly diagnosed so I shall take this opportunity of describing it to you.

Purulent involvement of the labyrinth may occur from within the skull or from the middle ear. The most frequent intracranial cause is cerebro-spinal meningitis. The infection advances up the internal auditory meatus and results in an empyæma of the labyrinth. If the patient recovers, bilateral deafness is present. Most of the inmates of our deaf-mute asylums have been made deaf by this means. There is no help for the patient in the course of the disease. However when the infection goes from the middle ear to the labyrinth, usually thro the round or oval window, assistance can be given. Such is the path in scarlet fever and measles. Middle ear suppuration complicating these two diseases is most liable to enter the labyrinth and it is this form which I shall describe tonight.

In order to make its cause clear the anatomy of the ear must be understood. You remember that the auditory apparatus is divided into three parts, the external, middle and internal ear. The external ear is composed of auricle, the cartilaginous and bony meatus to the drumhead. The middle ear includes the mastoid antrum, the tympanic cavity and its contents and the eustachian tube. The tympanic cavity is shut in externally by the drumhead, and internally is separated from the inner ear by a thin wall of bone which has two openings, into one of which the footplate of the stapes is fastened, while the other is closed by membrane only. The internal ear or labyrinth is situated in the petrous portion of the temporal bone surrounded on all sides by thin compact bone, which separates it externally from the middle ear, anteriorly from the middle fossa, and posteriorly from the posterior fossa.

The labyrinth is a complicated system of bony canals. In the center is the vestibule, a small cavity into which the three semicircular canals, lying posteriorly open. The cochlea lies anterior to the vestibule and also opens into it. A layer of endothelium lines the bony labyrinth. Inside this system of canals is a similar system of membranous canals, which are about 1-5 the size of the former. In the space which remains there is a fluid called perilymph which surrounds the membranous canals on nearly all sides and communicates with the subdural space. Inside the *membranous* labyrinth there is also a fluid which is called endolymph. This has no outlet except a blind sac which lies upon the dura of the posterior fossa.

Altho the inner ear is one system, it has three functions: that of hearing which is done by the cochlea: that of interpreting turning motions of the head which is done by the semicircular

canals; and that of perceiving the position in which the head is held, which is done by two membranous sacs in the vestibule.

An exact knowledge of the condition of the inner ear can be obtained by the various tests at our command. The first point is to find out the state of hearing. It is important to find out whether an ear is absolutely deaf or not. If we find that it is, it may mean that the nerve ends in the membranous cochlea are destroyed by suppuration.

It is not a simple matter to find out whether an ear is totally deaf or not. It is difficult absolutely to exclude the other ear. The usual method is the use of some kind of noise-producing apparatus in the healthy ear and then the diseased ear is tested by talking or shouting if necessary. This is a crude way as the noise which obliterates hearing in the good ear may exclude a slight degree of hearing in the tested ear. This is overcome by Neuman's electric noise-producer, which conveys the noise produced in another room to the ear by wires. An equally good way is to allow a steady stream of water to run into the healthy ear and at the same time examine the other for hearing. This effectually deafens the good ear and causes no change in the examined ear. The six foot speaking tube test is also used. If an ear is totally deaf and the other not affected, the patient will answer the conversational voice three feet from the deaf ear when the other is held shut with the moistened finger. Now if under the same conditions a speaking tube of two meters length be used the patient will answer perfectly the conversational voice if any hearing for voice remains. These tests are always used together as one alone is not considered conclusive evidence.

We learn a great deal about the labyrinth from its characteristic nystagmus, which is different from any other kind of eye motions. It is characterized by a slow movement of the eyes in one direction, then a quick jerk toward the opposite side. It is always increased on looking in the direction of the quick component and decreased or stopped on looking toward the opposite side. It is usually rotatory, persists even when the eyes are closed, and gets milder upon repeated examinations. These points will differentiate labyrinthine nystagmus from any other kind. Labyrinthine nystagmus, if marked, is accompanied by a peculiar form of dizziness. The patient sees objects turn to the right or to the left or imagines that he is turning in the opposite direction. The attacks are always most marked upon arising in the morning and may be accompanied by vomiting. Of course at this time the patient's equilibrium will be disturbed. This same nystagmus which when present spontaneously is caused by disease can be produced by our tests.

In examining the semicircular canals all degrees of disease, whether degenerative, inflammatory or suppurative, may be ascertained. The most delicate test is this: a revolving chair that neither rises nor lowers is used. The left ear is tested by turning ten times to the right within ten seconds. If the ear is normal there will result a nystagmus to the left which will last about twenty-two seconds. The right ear is examined by turning to the left. A variation of the time of the persistence of the nystagmus present after turning tells us whether the canals are hypersensitive due to some focus of irritation or are less so or do not react at all.

The next most delicate test is the caloric or hot and cold water test. Cold water is allowed to run into the auditory meatus and normally after a few minutes nystagmus to the opposite side will appear. If hot water is used nystagmus to the same side is present. This result may appear quicker or later than normal or may not appear at all, in which case the labyrinth may be full of pus.

The mechanical test or Alexander's fistula symptom is performed by compressing and rarifying the air in the external auditory canal, which will cause a similar condition in the labyrinth if there is a fistula present. Then upon pressure there will be nystagmus to the opposite side. This is the usual sign and is characteristic of fistula into the horizontal semicircular canal.

The test by galvanic current is not so delicate since as long as the auditory nerve is alive it reacts. The test is best made by placing the poles on the ears. A current of about 4 milliamperes will normally cause a nystagmus toward the cathode.

The patient's equilibrium is tested by noting the difference between that maintained by the patient with eyes open and that with eyes closed. If there is no difference when standing on both feet with heels and toes together, standing on one foot is tried. By means of all these tests together an accurate and positive diagnosis of the labyrinth condition can usually be made.

One can easily imagine the advancing line of demarcation between the diseased and healthy bone in the middle ear and its walls. It gradually spreads until it involves the round or oval window, both of which open into the labyrinth. When the disease gets to this point involvement of the labyrinth begins. If the bony capsule of the labyrinth alone is diseased, it is called paralabyrinthitis. If the bone is necrosed down to the endothelial lining of the bony canal it is paralabyrinthitis with fistula. When this endothelium is destroyed involvement of the fluid in the

bony canals or perilymph occurs, so it called perilyabyrinthitis. Finally the membranous canals and their contents the endolymph succumb and we have an endolabyrinthitis.

Paralabyrinthitis or diseased bony capsule of the labyrinth causes no symptoms by which we may recognize it before operation. There may be granulations or a polypus growing on the promontory or inner wall of the middle ear which would show that the capsule there is diseased but unless we can see signs of the bone disease, we cannot make a diagnosis of it. Still it is very often present in chronic middle ear suppuration.

When the caries extends thro the bony capsule and thus forms a fistula to the enothelial lining, the symptom of its presence appears, that is the nystagmus caused by raising and lowering the pressure in the external auditory canal, which does the same thing to the labyrinth thro the fistula. In addition upon testing there may be a slightly quicker appearance of the nystagmus, showing that the inner ear is more irritable than normal.

When the endolium lining the bony canal gives way and the infected material enters the perilymph there are some additional signs. Hearing is somewhat diminished. There is characteristic dizziness with nystagmus toward the affected side. When doing the turning test the patient may become so dizzy after one or two turns that he will vomit. The caloric test will have the same result, the nystagmus appearing much quicker than normal or he may not be able to stand the test at all. Care must be taken in these cases to differentiate the spontaneous nystagmus from that which is caused by our tests. In this stage of the disease if the initial lesion was in a semicircular canal the trouble may remain local for some time but if the perforation was into the vestibule or cochlea it immediately becomes a diffuse perilyabyrinthitis.

The next and final step is the succumbing of the membranous labyrinth and its contents the endolymph and nerve ends. With the rupture of this membrane the process immediately becomes general, that is the whole membranous labyrinth is attacked at once since it is simply a number of tubes which intercommunicate. With the entrance of pus into this system the inner ear *suddenly* ceases to perform its functions. There is sudden complete deafness in that ear, severe dizziness, perhaps vomiting, nystagmus toward the well side in all positions of the eyeball and disturbed equilibrium. The after-turning nystagmus caused by the affected ear will be practically negative, only a few twitches of the eyeball appearing. The caloric test will give no result, which shows that the labyrinth does not perform its function. The

fistula symptom will be negative whether there is a fistula or not. The symptoms present remain severe for a short time only. After a few days they gradually become milder and disappear almost completely at the end of a week or ten days, if the patient survives. The spontaneous nystagmus will be present only on looking toward the healthy side and the equilibrium will be found to be slightly disturbed upon testing for it, but on the other tests the labyrinth will be found to be functionless.

Such is the cause of a purulent infection of the labyrinth. It may advance slowly or rapidly but the change from peri- to endolabyrinthitis is always sudden. At this time the nystagmus which has been toward the diseased side upon looking in that direction will suddenly change toward the well side and will be present no matter in which direction the patient looks. Severe dizziness with vomiting and sudden complete deafness occur at this time.

If this advancing involvement of the labyrinth is recognized in time, the hearing, perhaps the life, of the patient may be saved. The radical mastoid operation will usually cure all of these stages except the last one, suppurative endolabyrinthitis. When the pus has entered the membranous canals the radical no longer suffices. The labyrinth must be drained. If left alone the pus may break externally and heal spontaneously or it may rupture into the middle or posterior fossa causing extradural abscess, meningitis, encephalitis, brain abscess, etc. None of these results must occur but they very likely will. Therefore it is better to make a large external opening in a case of empyæma of the labyrinth and to remove all dead bone too, if the suppurative process of the labyrinth is chronic. Many other diseases of the labyrinth or auditory nerve have some symptoms which are similar to those described in this paper. All can be differentiated from the subject under discussion except possibly a serous inflammation of the labyrinth or labyrinthitis simplex. At a given time the patient may show signs and symptoms which will be applicable to both diseases. In such a case there is usually something in the history which will point to one or the other disease. The serous inflammation practically always follows a traumatism, the ear usually does not become absolutely deaf, there is short nystagmus toward diseased side, and healing occurs within a few days or a week with persisting function of the auditory nerve, a result which is extremely rare after a suppurative involvement. The labyrinth is functionless only for the second and third and possibly fourth day of its seven days course. The differential diagnosis of these two conditions is most important as the treatment is so different.

Serous labyrinthitis should be left strictly alone while the suppurative inflammation must be operated.

In this paper I have given only the main points upon which a diagnosis of suppurative labyrinthitis is made. There are degenerative and toxic conditions of the nerve, arterio-sclerosis, syphilis, and other diseases which affect one or both branches of the eighth nerve, and cause signs and symptoms somewhat similar to those related here. The different diagnosis can easily be made. However time will not permit me to enter upon this subject. The diagnosis of suppurative labyrinthitis alone is sufficient for one evening's study.

1195 MAIN STREET.

Three Years with the Army of the Potomac—A Personal Military History

BY WILLIAM WARREN POTTER, M.D., BUFFALO, N. Y., BREVET LIEUTENANT COLONEL, U. S. VOLUNTEERS; SURGEON IN CHARGE OF FIRST DIVISION FIELD HOSPITAL SECOND ARMY CORPS; SURGEON 57TH REGIMENT NEW YORK VOLUNTEERS; ASSISTANT SURGEON 49TH REGIMENT NEW YORK VOLUNTEERS; RECORDER SECOND DIVISION HOSPITAL SIXTH ARMY CORPS, ETC., ETC.

Friday, April 1. Everything is going on in the most quiet manner possible. There are but twenty-one patients in the hospital now, as the most of them were sent away last week, including the wounded of Morton's Ford, and Dr. Rowland accompanied them to Washington. Dr. Dwinell, of the Second Division, has not returned from his leave yet. I had a small card party last night, composed of doctors, among whom were Aiken, Dudley, and Neeley, the latter remaining as my guest for the night. The 57th moved its camp yesterday, occupying the hill where General Owen's Brigade formerly camped. It is expected that General Grant will review the Army by corps very soon, though it is not definitely known when the Second Corps' turn will come. All the ladies have left the camps and everything is settling down to business. It is not probable, however, that the campaign will open before the first of May, and nothing, of course, can be learned of even its probable character. A column of troops passed along the Corduroy Road today for the front, probably recruits and convalescents. It is supposed the Army of the Potomac now numbers upward of 100,000 men.

April 3. The Third Division Hospital is broken up and dis-

tributed to the First and Second Divisions, to conform to the consolidation of the troops. Miss Hancock, a nurse who has been with the Third Division Hospital all winter, comes to my hospital, and her house was moved today and set up alongside of my quarters. Dr. Dudley, in charge of the Third Division Hospital until now, goes back to his regiment, the 14th Conn. The recent rains have made the mud very deep. I have just been summoned to Division Headquarters for a consultation about medical matters of the Division.

April 5. Tuesday. It has stormed almost continually for the past week—rain, snow and wind—and the rain has not ceased to fall for twenty-four consecutive hours past. On my way to Division Headquarters Sunday I met Captain Arnold near the bridge, and he gave pleasant news from his wife, who arrived home safely. Captain McKnight's battery, late of the Third Corps, is to join the Second Corps in a day or two. Lieutenant W. S. Bull, formerly of the 49th, is an officer in McKnight's battery, and I shall be glad to have him near me again. General Barlow has arrived and assumed command of the Division. He appears to be much such a man as Hancock—nervous, impatient, wiry, with a searching eye, and keeps one at a distance—yet I believe in him, and think the Division has a competent commander who will make it do famous work. Dr. Dwinell, who has had quasi charge of the corps hospital, is expected back tomorrow. His position is non est now, as each Division Hospital is independent of the other. Miss Hancock is doing good work as nurse, and is very much liked by the sick and attendants.

April 7. This is the first pleasant day we have seen for eight days, and it is quite a treat to see the sun once more. General Barlow paid a visit to the Hospital today inspecting it thoroughly, as he does everything, and expressed himself as being well satisfied with its appearance. He is a sharp observer, and nothing escapes his eye. Dr. Rowland has not been well for two days, but is better today; he has been appointed Surgeon of the 61st N. Y.

April 10. The bridge over Mountain Run, between here and Division Headquarters was carried away last night, and the mail is shut in at Division Headquarters. I have just learned also that two R. R. bridges between here and Washington, were swept out by the recent high water. Lieutenant Anderson, commanding Ambulance Corps, who has been on recruiting service all winter, has just returned. I went to the artillery Brigade today, and there learned that Captain Arnold had gone home to attend the funeral of one of his children, who died suddenly of croup. The rain fell in torrents all night before last, yesterday, and last night, but it is pleasant today. I met Colonel Francis A. Walker today,

and he made pleasant inquiries after my wife whose acquaintance he made last winter.

April 13. Today it is pleasant, warm and springlike. I took dinner at Division Headquarters today, and all the staff, particularly Captain Marlin, made inquiries after Mrs. Potter. The cars are running again to Washington, the bridges having been repaired. Captain Lewis Nolen is appointed Inspector General of the 3d Brigade.

April 15. The weather continues pleasant. I have 85 patients in hospital, and am expecting an order daily to send them away. General Hancock will be here tomorrow to inspect the hospital, and we are policing it today with the entire force. Miss Hancock, the nurse, and Mrs. Lee, the washerwoman, went away today, in accordance with an order from Headquarters A. of P. clearing away all citizens by the 16th inst. In consequence of this order all citizens, sutlers, etc., are moving away from Brandy Station, and by tomorrow it will look quite deserted there.

April 17. The days drag wearily along, and I am almost tempted to wish for active service to dispel the enui. Yesterday being rainy, General Hancock did not inspect the hospital as was anticipated. Captain Favill has sent Mrs. Potter a programme of the hops we had last winter; they came rather too late for use, but will be an interesting souvenir of those delightful times. There is a rumor in the Second Division Hospital that no more letters will be sent away from the Army after today; but I don't place much reliance upon it, for they are rather gossipy and a little given to the sensational over there.

April 19. This is a beautiful day, and I am momentarily expecting General Hancock to inspect the hospital, as he is already inspecting the troops, and will come here next, having sent word to that effect. The pontoon train has just passed along the Corduroy toward the Rapidan, which is ominous of "business" in that direction in the course of the next few days. The Artillery has been practicing at a target on the plain toward the Fitzhugh house all the morning. General Grant is expected to review the Second Corps tomorrow, and I shall attend with the Division Staff, as I am desirous of seeing the distinguished Lieutenant-General.

April 21. The day is delightful and the inspection by General Hancock, which did not take place Tuesday, has just been completed. We had quite a galaxy of "stars" present. Major General Hancock, and Brigadier Generals Barlow and Gibbon, with their several staffs were in my quarters after the inspection was over, and I served them a light luncheon with sherry. General Hancock pronounced the hospital perfect in every respect—indeed, it never looked nicer than now, but I suppose we shall be obliged to

break it up in a few days. The sick have all been sent away, Dr. Rowland accompanying them to Washington, and to return on Saturday. I am now preparing for the anticipated march, filling up the wagons with stores, dressings, and medicines, and equipping two army wagons also with my own supplies. I think we shall start about the first of May. I have received the photographs of the hospital which were taken by Gardner, of Washington, and they are very correct pictures; I shall send two of them home in a day or two.

April 23. The Headquarters is all there is left of that once grand institution, the First Division Hospital. All the tents were taken down this morning, and we are now busy packing all the property we cannot take with us in the active campaign approaching. The day is hot and windy, and the ground is drying fast. We are likely to start any day. Yesterday I attended a grand review of the Second Corps by General Grant, and it was by far the best one I ever saw. The corps never looked finer, nor marched better, every officer and man seeming anxious to show the Lieutenant-General how well they could do. After the review, Generals Grant, Meade, Sheridan, and about twenty Brigadier Generals were entertained by General Hancock at his Headquarters. An exhibition drill of the 19th and 20th Mass. regiments was also given at General Webb's. Dr. Rowland has just returned from Washington, whither he went with the sick list two days ago.

April 25. Though Division Hospitals are among the things that were, I am still in the same place occupying the wall tent for quarters, which stands just where it did all winter. Dr. Rowland has gone to his regiment, which leaves me quite alone, except the steward and nurses. Today has been the warmest of the season thus far, though it rained all night last night. There is a rumor that no mails from the Army are sent beyond Washington, but we continue to receive our mails regularly. Lieutenant C. H. H. Broome of "Ours" has been detached for duty in the War Department. The lucky and handsome Broome will thus escape the dangers of the campaign. An order was issued yesterday from Division Headquarters assigning me to the charge of the Field Hospital during the campaign, and detaining Dr. Plunkett, 2d Del., to report to me as Assistant; also naming the hospital stewards and nurses for the campaign, all to report for duty and instructions the 26th, tomorrow.

April 27. Measles has appeared among the troops, and the cases are sent to me for isolation as fast as recognized; I have three tents full already. Colonel F. A. Walker is down with a mild varioloid and is in the quarters lately occupied by Dr. Dudley. Dr. Neeley is sick and goes home for twenty days, so he will es-

cape the next fight. Dr. Rowland's place will be supplied by Dr. Plunkett tomorrow.

April 29. Friday. We had a fine dinner today, consisting of beefsteak, pork stew, baked potatoes, coffee, porter, and custard, which is good fare, even for a soldier. It is warm and summer-like, and I am moving my tent up into the old street, to get rid of the mice that infest the old location. Snakes, too, are beginning to appear; Corbleigh killed one in his tent a day or two ago. I expect my remaining patients will be sent to Washington tomorrow, and we may move by Monday. I understand that all mail will be stopped except for General and Staff officers, but I am included in the excepted list. Dr. Rowland called today, and Dr. Dougherty yesterday.

Sunday, May 1. I sent the remainder of my sick away yesterday, so the decks are clear for action. I have a small white mare. Corbleigh traded his "Joe" horse for a few days ago, which will fit us out very nicely for the campaign. Old Mr. Fitzhugh called upon me this morning to say god-bye, having heard we were going to move soon. Dr. Rowland was mustered as Surgeon yesterday.

May 3. Tuesday. I have just written the last letter home that I shall send from this camp, for we shall, no doubt, be off tonight; this, at any rate, is the import of the orders we are receiving. I visited the 6th Corps on Sunday, and saw Dr. Hall, Colonel Bidwell, and others. All sent a kind word to Mrs. Potter. It is now three o'clock P. M., and everything is packed up and ready for the start. After supper I shall go over to Division Headquarters and remain there until the final order is issued.

GRANT'S OVERLAND CAMPAIGN.

1st. *The Wilderness.*

Wednesday, May 4. We sat around music hall at Headquarters last night until midnight. Then started on the Grand Overland Campaign. By the arrival of daylight we had reached the Rapidan at Ely's Ford and soon crossed without opposition, taking the road to Chancellorsville, where the head of the column halted at nine-thirty A. M. By noon the entire corps was up, and we bivouacked for the night near Hooker's old battlefield of a year ago. During the afternoon I rode over the field, still to quite an extent marked by the wreckage of that unlucky fight, examining the various points of interest where I had spent four unhappy days the previous May. The morning of the 5th, bright and early, we were under way again, but by ten o'clock A. M. our advance was arrested in its progress, and the ambulance and hospital train halted for some hours in a heavy wood. We finally got under way sometime after noon and moved slowly along, establishing our hospital toward night near the Carpenter House. The Division be-

came engaged late in the afternoon, and Lieutenant Colonel Chapman, 57th N. Y., commanding the skirmish line, was the first officer killed in the Division. His body was brought in during the evening, and laid alongside my tent carefully covered with water-proof blankets. Next morning it was embalmed by Dr. Dwinell; and afterward sent to Fredericksburg for shipment North.

For the next two days, the 6th and 7th of May, we heard the rattling of musketry almost constantly but rarely the sound of artillery, as cannon could be of little service in the dense chapparal. Several hundred wounded were cared for in my hospital during these three days, and on the afternoon of the 7th I was ordered to send them to Fredericksburg, supplied with nurses and three days' rations. Dr. C. S. Hoyt, Surgeon 39th N. Y., was officer of the day on the 7th, and I liked his zeal and method so well that I subsequently had him appointed executive officer of the hospital.

During our stay in the Wilderness we had a supply of ice, that General Barlow was kind enough to send from a house near the line of battle. On the night of the 7th we moved toward the left, were at Todd's Tavern on the 8th and 9th, and at Po River on the 10th. In the withdrawal of the Division from across the Po, some of our wounded were left behind, falling into the enemy's hands. We established ourselves at Cossin's on the 11th, where we were destined to have the hospital taxed to its utmost capacity.

2d. Spottsylvania.

We have been almost constantly fighting for the past seven days, and are now confronting the enemy with a prospect of renewing.

(To be continued.)

SOCIETY PROCEEDINGS

THE recent meeting of the A. M. A. at Atlantic City was most successful. The attendance at these meetings for the last few years has been as follows:

1900 Atlantic City	2,019	1906 Boston	4,722
1904 Atlantic City	2,894	1908 Chicago	6,446
1907 Atlantic City	3,713	1910 St. Louis	4,084
1909 Atlantic City	3,273	1911 Los Angeles	2,153
1912 Atlantic City	3,600		

The larger attendances are pretty obviously proportionate to the increment of the local profession. President Murphy, in his address to the house of delegates, called special attention to

the need of increasing the membership, citing the following statistics:

May 1, 1908	31,343	1911	33,960
1909	33,935	1912	34,283
1910	34,176		

Roughly speaking, therefore, the normal attendance at the annual meetings, barring allowance for local increase and diminution due to high average distance, is slightly over 10%. Between a quarter and a fifth of all physicians in the country belong to the A. M. A.

The next meeting will take place in Minneapolis under the presidency of Dr. A. Jacobi of New York, with Dr. John A. Witherspoon of Nashville as president-elect. Our own territory is represented by Dr. John L. Heffron of Syracuse, as second vice-president.

The relegation of all business to the house of delegates and the perfecting, with increased experience of the means of registering, providing amusement, scientific and commercial exhibits, &c., has removed many confusing factors from these great medical gatherings. Some problems are left unsolved and are, perhaps insoluble. One of these is to provide halls of convenient location and size, of such acoustic properties that comparatively untrained speakers may be readily heard, and with such ventilation that large audiences may be comfortable. Another is to secure proper attention of audiences for several days of assiduous attendance, and still allow time for social gatherings, discussion of business and professional matters by individuals meeting by chance or by appointment, careful study of the commercial, scientific and other educational exhibits, &c.

A minor point to be considered is the advisability of continuing the annual ball. If this institution is to be maintained, it ought to be begun at a seasonable hour, considering the fatigue of the attendants and the serious business of the next day; the orchestra should be instructed that it is not playing for the gambols of a high school dance; there should be some authority to bar the turkey trot and the hosiery exhibits that marred the dignity of the recent one, and that undoubtedly were attributable to uninvited guests.

The writer's first experience with the meetings of the A. M. A. was at Nashville in 1890. Not to mention the very marked change in organization, exclusion of politics and business from the general sessions and the establishment of a policy of strong central government, one who has attended these meetings even occasionally, has had the opportunity to note a remarkable evolution. If we remember rightly, it was at the Columbus meeting in 1899

that popular sentiment developed that there was to be no more second-grade work by first-grade men; no more publication and, if possible, no more reading of inferior papers by anyone; no more interruption of section programs by celebrities who ran from place to place, dropping words of wisdom as they ran. In other words, the quality of the scientific work suddenly rose and, for a number of years, barring inevitable exceptions and perhaps the transactions of closely limited, technical societies, the transactions of the A. M. A. are second in scientific value to those of no organization in the medical world.

Even in externals, the men—and the accompanying women—seen at these great national conventions, have improved. The benefits of mutual attrition have been manifest in various ways. There is developing an esprit de corps, frankly, perhaps harshly critical at times, but loyal at heart and making for professional solidarity.

The Buffalo Society of Sanitary and Moral Prophylaxis met at the Genesee Hotel, June 17. The investigating committee reported an estimate of 4800 persons afflicted with venereal disease at any one time, in the city (a very conservative estimate if we include chronic gonorrhoea and tertiary syphilis). The work of this society can be furthered by taking membership at one dollar a year, remitting to Dr. Robert W. Hinds, Secretary.

At the annual meeting of the Buffalo Academy of Medicine, June 11, reports of the year's work were received, indicating an average attendance of 75—100, at each of the eight meetings of each of the four sections. About half of the programs were furnished by out-of-town men. Exact figures are impossible, on account of the failure of one of the sections to report. The retiring president, Dr. S. Y. Howell, gave a stirring address with various ethical problems confronting the profession. Dr. Wm. Scott Renner was elected president for the coming year. The meeting ended with a collation.

The Rochester Pathological Society held the annual picnic at the Island Cottage on the lake shore, June 13, 1912. About 50 were present. Dr. Wynn B. Palmer made his address as retiring president on "Ethical Proprietaries, Frauds and Nostrums," hitting straight from the shoulder. The new president is Dr. George A. Marion.

The Rochester Blackwell's Medical Society of women physicians also held a picnic upon the same date, June 13, 1912, at

which Dr. Li told of her experiences in China. Dr. Mary A. Nickerson presided.

The Monroe County Sanitary Association met June 18, 1912, to discuss vaccination and other sanitary measures. Dr. H. J. Mann, of Brockport presided.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF BUFFALO—37th Annual Meeting of the Alumni—Commencement Exercises.

Tuesday, May 28, reunions of classes ending in 2 and 7, were held.

Wednesday morning, Dr. G. H. A. Clowes of the N. Y. State Institute for Malignant Diseases, described the Serum Reaction in Gonorrhea and Dr. E. R. Larned of Detroit, spoke on Phylacogens. At noon, the visiting alumni were given an auto ride, followed by a luncheon in the college library. In the afternoon, Dr. Samuel G. Grant, Professor of Rectal Diseases in the N. Y. P. G. Medical School and Hospital, gave a lecture and clinic. Thursday morning, there was a symposium on Syphilis, Dr. G. Howard White of Baltimore discussing serology; Dr. Howard Fox of the N. Y. Skin and Cancer Hospital illustrating the skin manifestations with lantern slides; Dr. Charles F. Hoover, of Cleveland speaking of the visceral manifestations. After luncheon in the college library as guests of Drs. H. C. Buswell and E. J. Meyer, Dr. Hoover gave a clinic on aneurysm. The latter part of both Wednesday and Thursday afternoons was devoted to the Harrington lectures, this year by Dr. Ludwig Kektoen of Chicago, on Immunity in Relation to Surgery. (These will be published in this journal) The smoker, tendered by the Dean and Faculty, was held Wednesday evening.

The annual alumni dinner was held Thursday at the Statler, Dr. Peter W. Van Peyma acting as toast master and displaying as keen a wit as he has demonstrated a seriousness in technical matters. Under the leadership of Dr. Busch, many songs were sung. Of the various toasts, allusion can be made here, only to the frank discussion of the problems of the college and the eloquent appeal for alumni support, by Dr. Park. Nearly 200 alumni were registered at the meeting and of these, about 75 were from outside the city.

The commencement exercises were held Friday morning in the Teck Theatre, the address being given by Senator George B. Burd. Graduates in medicine numbered 40; in pharmacy 40; in analytic chemistry 7; in law 37 and in dentistry 30. Following the exercises, the graduates and alumni were entertained by the fac-

ulty at luncheon at the University Club. The graduates in medicine were as follows:

Abraham Highman Aaron	Joseph Edward Maryanski
*Nathaniel Alpert	George Peter Michel, <i>Ph.B., A.M.</i>
Peter Joseph Barone	John Robert Monihan
Lawrence Melvin Belzer	Jerome Aloysius Murphy
Theron Blain Bond	Martin Francis Nolan
George Robert Colline	Joseph Aloisius Nowicki
LeGrand Augustus Damon	Faye Horace Palmer
John Tom Donovan	Frank Nelson Potts
Alva Garfield Dunbar	Edward Emmett Powers
Henry DeWitt Duryea	Grover Lee Priess
Frank Macbeth Ende	Leo James Rozan
Harold Henry Fox	Floyd George Schuler
Milton Harry Goldberg	Elmer George Steel
Harry Carl Guess	*Clare Nelson Shumway
Leon Couch Hamilton	George Romain Stalter
John Arthur Kneller	Walter Cyril Steele
Irving Nelson Kohler, <i>A. B.</i>	Nelson Wilbert Strohm
John Joseph Kohlhas	Horace Rowe Taylor
William John Lavelle	Worthington Charles Ward
Oliver Angus McCall	Orton E. White

*Diploma withheld on account of deficiency in time.

ON JUNE 6TH at Atlantic City, during the meeting of the American Medical Association and following a symposium on anesthesia, the National Society of Anesthetists was organized. Prof. Yandel Henderson of Yale, chairman of the commission on anesthesia of the A. M. A. occupying the chair, those assembled for the symposium acting as a committee of the whole, proceeded to organization and elected the following officers for the year 1912-13.

President James T. Gwathmey of New York, Vice Presidents F. H. McMeechen of Cincinnati, Charles K. Teter of Cleveland, Yandel Henderson of New Haven. Secretary William C. Woolsey, 88 Lafayette Ave., Brooklyn. Treasurer Harold A. Sanders of Brooklyn.

The constitution and by-laws were ordered to be drawn by the executive committee and submitted to the Society at its next meeting for adoption; all names submitted for membership, if qualified in the estimation of the executive committee, shall be considered as charter members if presented within a period of sixty days and accompanied by the levied dues of three dollars.

The National Society of Anesthetists in this notice calls all

those who are actively interested in this work to join its ranks and assist in developing the subject of anasthesia to greater perfection and more uniform safety.

WILLIAM C. WOOLSEY, *Secty.*

June 10th, 1912.

Synopsis of Minutes of Meeting of Medical Society of the County of Erie, June 17th, 1912.

MEETING held in the Buffalo Library Building, called to order, at 9 p. m., by 2nd Vice-President Dr. John V. Woodruff.

Minutes of previous meeting and Council meetings of May 6th and June 12th read and adopted.

Resignations of Drs. George W. Schaefer and G. K. Lester of Blasdell, N. Y., were accepted.

Dr. Bonnar, Chairman of the Board of Censors, reported a barber of Lackawanna N. Y., had been fined \$25.00 for cupping.

Resignation of Mr. Charles A. Doane as counsel for the society was accepted with regret and a vote of thanks tendered him for his able services in the past.

A special committee, of which Dr. Floyd S. Crego was chairman, reported regarding the need of a Psychopathic Ward or Hospital and recommended the construction of such a hospital on the West Farms site, which has been selected by the city of Buffalo for the construction of a Municipal General Hospital, such recommendation being adopted by the society.

Dr. Henry R. Hopkins was elected an honorary Vice-President to the 4th International Congress on School Hygiene to be held in Buffalo, August 25th to 30th, 1913, also as delegate to said Congress from the Medical Society of the County of Erie.

The following papers were presented and discussed:

Symposium—Conservation of Vision, led by F. Park Lewis; Prevention of Ophthalmia Neonatorum, Dr. Arthur G. Bennett; Treatment of Ophthalmia Neonatorum, Dr. Lee Masten Francis.

The Annual meeting of the **Medical Alumni of Syracuse University** was held at the Medical College, Monday afternoon, June 10th. Dr. William T. Councilman, Professor of Pathology at Harvard, addressed the meeting on "Some Personal Recollections as a Teacher of Medicine." Dinner followed at the Onondaga, which was attended by nearly a hundred alumni. Dean Heffran acted as toastmaster and called upon Dr. Councilman, Commissioner Porter, of the State Board of Health, and Lawrence Sisson for after-dinner speeches.

TOPICS OF PUBLIC INTEREST

THE Child Welfare Exhibition, held in Convention Hall, Buffalo, May 27 to June 3, was most interesting, valuable, and entertaining. The illustration of the work of the municipal health department was especially to be commended. The mechanical device by which six babies revolved in view of the public while the seventh was cut off by the sickle of Death, impersonated by a grim lady doll in black was criticised as a gallery play by some but it must be remembered that it is the gallery which we are trying to reach in such popular exhibitions. The children's dances and the enlistment of the boy scouts and camp fire girls, should also be considered seriously, for a very important point in such educational work is to secure child welfare through the intelligent cooperation of the children themselves. Children are just as intelligent as adults; they sometimes lack experience and exact knowledge and usually opportunities for initiative but, beyond the first few years of life, success in their moral and physical control depends largely on training them to act for themselves. The Exhibition owed much of its success to the realization that a label without an exhibit is better than an exhibit without a label. Some mistakes were made. The teaching as to the economic and physiologic values of foods included some inaccuracies and we did not quite like the card showing how a working girl should spend her wages, how much she had to have to live, how much she got and then the question as to how she made up the deficit. The implication was a slur on a good many girls who, somehow or other, manage to accomplish the statistically impossible, without resorting to the easy and obvious way. But, as a whole, the exhibition reflected the utmost credit on its managers, the public were genuinely interested and much good will result.

There is one thought that we add with some hesitancy, as it might seem to imply a censure of many existing philanthropies although nothing is further from our intention. If we were able to take an active part in philanthropic work, we would pass by education, by schools, libraries, museums, lecture courses, &c; we would ignore the heathen, abroad and at home, as well as various strictly religious campaigns; we would establish no hospital, asylum, sanitarium or sanitary or hygienic method; we would disregard the immigrant, the blind, the insane or otherwise physically defective, the babies, the young man and woman, the aged. In short, we would try to accomplish something for the general economic, social and sanitary welfare of the average, respectable, self-supporting, middle aged man and woman. Did

you ever stop to think on the dull, hard, lonesome lives of this part of the population, that appeals to us in no special way as needing guidance, sympathy, or help? Did it ever occur to you that a little effort along the same general lines so well followed for other classes, could greatly improve the comfort and increase the pleasure of living for this uninteresting class, to which, save for better opportunities and fortune, most of you and I belong? Did you ever realize how many suicides could be prevented if the victims were young enough to be reached by the Y. M. C. A. and many similar organizations, if they were blind, or crippled, or if they had some definite disease, or if they were actually senile?

The Columbus Hospital (Buffalo) training school held its commencement exercises June 12. Four nurses were graduated. Rev. Angelo Strazzoni, of St. Anthony's Church delivered the address and Dr. Marshall Clinton presented the diplomas. This event marked the fourth anniversary of the hospital.

The Buffalo General Hospital graduated a class of 18 on June 11. Capt. Calvert K. Mellen, Principal of the Lafayette High School gave an address, Dr. Wm. Ward Plummer presented diplomas and Mr. George R. Howard the badges.

The Lockport City Hospital held its first training school commencement June 12. Dr. C. N. Palmer delivered the address.

The Warsaw Hospital, Dr. W. R. Thomson resident surgeon, has issued its first annual report. In reality, the report covers only ten months of actual operation. About 170 operations are included, with a total of three deaths. Operations not done at the hospital are not included. A brief description of the technic is given and, from personal observation, we can commend both the actual work and the broad-minded spirit of the surgical staff in regard to the strictly medical features of cases.

The Anti-tubercular Committee of the N. Y. State Grange has issued a 20-page circular, with illustrations. In the last twenty years, the mortality from tuberculosis in cities has fallen by 23.9 deaths per hundred thousand population, while in the country, the fall has been 5.3 deaths. It is not generally known that the total rural incidence of disease and mortality is now greater than the urban. Rensselaer, Ulster, Ontario, Dutchess, Monroe and Schenectady counties now maintain tuberculosis hospitals at an

average per diem, per capita cost of \$1.00 to \$1.40. The plans for 1912 are as follows:

A. General State-wide propaganda work.

- (1) Circulation of this report in printed form.
- (2) Letters to Granges urging action on various subjects from time to time.
- (3) Preparation of small photographic Anti-Tuberculosis exhibits for circulation among Granges.
- (4) Preparation of program for use of lecturers.

B. Intensive work to be recommended to subordinate and Pomona Granges.

- (1) Possible employment of visiting nurses for the rural districts for the nursing of all cases of disease and the instruction of the public in modern methods of hygiene and sanitation.
- (2) Fostering more active interest in local public health methods such as county tuberculosis hospitals, and better enforcement of the public health laws, including the law requiring the reporting of cases of tuberculosis.
- (3) Efforts to improve rural public health standards through the appointment of the best possible type of town and village health officers and by eliminating political considerations entirely from these appointments and from the enforcement of public health laws.

The following physicians from western New York were in attendance at the recent meeting of the A. M. A.: Buffalo: Brown, Filsinger, Francis, Howe, Himmelsbach, Johnson, McKee, March, Otto, Rooth, Thornton, Ullman, Weed, Woehnert, Wilson, Bayliss, Benedict, Bennett, Congdon, Fronczac, F. P. Lewis, Love, Linklater, Potter, Rochester, Rosengren, Stockton, Townsend, Grove, Walsh, Wende, A. A. Jones; Auburn: Austin, Sears; Perry: Way; Rochester: Ballantine, Comfort, Davis, Soble, Whitbeck, Zimmer, Bowen, Mulligan, Potter, Swan, Williams, Jameson; Ithaca: Baker, Wilson, Tinker, Parker; Hornell: Barney, Kelly, Kyson; Johnstown: Beebe; Elmira: Case, Jennings, Fisher; Jamestown: Cottis, Johnson; Victor: Clapper; Canaseraga: Deegan; Rome: Gillette, Reid; Cuba: H. Gillette; Binghamp-ton: Green, Quackenbush, Hough, Watson, Lappens, Chittenden; Danville: Gregory; Amsterdam: Hicks; Saratoga Springs: Humphrey; Watertown: W. J. Kellow, Meader; Batavia: Manchester, Johnson; Troy: Mallet; Dunkirk: Richards; Fredonia: Robson; Plattsburg: Schiff, Silver; Olean: C. Smith; Tonawanda, Britt; Middletown: Conner; Oneida: Carpenter,

Pfaff; Geneva, Knickerbocker, Skinner; East Aurora: Phelps; Ogdensburg: Madill, McIlmay; Canandaigua: McClellan.

THE SOCIETY OF MEDICINE OF PARIS, in a request for an exchange, announces that it already has more than sixty French medical journals on file and that it intends to secure the most interesting foreign journals. This establishment of a consulting library for periodic literature, is stated to be a new departure in France. This is surprising to American physicians who have free access to the important literature of the world in almost every city of any size.

The Buffalo Branch of the *American Association for the Conservation of Vision* is raising funds for this most worthy cause. The Russell Sage Foundation has promised a contribution provided that \$5,000 is raised by local subscription. The local Board of Health and the Department of Education, also endorse the movement. Over 30,000 persons in the U. S. are unnecessarily blind. Dr. F. Park Lewis is President of the Buffalo Branch. Contributions may be sent to Mr. J. F. Schoellkopf, 454 Franklin St.

An emergency operation for acute inflammation of the appendix has recently been performed in the open air, at the annual encampment of Canadian troops at Niagara-on-the-Lake. The patient is recovering. This is the first major operation required during these encampments.

The Detroit and Cleveland Line has placed in commission, between Buffalo and Detroit, a new steamer costing a million and a half. In size, speed, safety, modern equipment and luxury, travel on the Great Lakes now compares favorably with ocean travel. In fact the few ocean boats that surpass the modern lake boats in size and speed are considered by veteran navigators of both salt and fresh water, to do so at the sacrifice of safety—as has recently been demonstrated.

The Corning epidemic of typhoid has given a lesson that is to be heeded. Corning and Elmira are to unite in securing a water supply from Blossburg, Pa., 50 miles distant, at a cost of a million.

Until further notice the Directory of Nurses of the Lexington Heights Hospital will be in charge of Miss Belle, 179 Franklin St., Buffalo.

The American Medical Directory contains the names of nearly 148,000 physicians, for the U. S. and Canada. The total population of the two countries is about 103,000,000—giving a ratio of about 1 physician to 700 people. While the list includes only licentiates and doubtless omits many eligible to practice but engaged in other occupations or retired which would swell the census figures, it is undoubtedly a more accurate as well as a more hopeful basis for calculating average clientele. Less than ten years ago, the average clientele was estimated at 600 or even less. The annual mortality among physicians is approximately 3,000 and the annual increment by graduation and licensure is running at about 5,000, while the annual increase of population is about 2,000,000. In other words, each graduate may either take a vacancy due to death or have a potential new clientele of 1,000. This is, by comparison, a very favorable showing but we must not be blind to the actual fact that there is still a large excess of supply over demand and must exercise every reasonable restriction on the output of fresh supply until a practical equilibrium has been reached.

Government List of Industrial Poisons.

The Department of Commerce and Labor is distributing a bulletin giving for the first time the English translation of the list of industrial poisonings which the International Association for Labor Legislation through its various national organizations has been revising and completing since 1908.

Commissioner Charles P. Neil writes, "In 1910 at the time of the publication by the Bureau of Labor of the earlier list of industrial poisons little accurate information was available concerning the prevalence of cases of industrial poisoning in American factories. No state had made any legal requirement for the reporting of cases of industrial poisoning, and in the absence of such definite basis for statistical information a general impression had prevailed that American employees were largely exempt from the dangers from which industrial workers in other countries suffered."

Special investigation in the white phosphorus match industry, the inquiries of the Illinois State Commission on Occupational Diseases, and a study of the white lead and lead oxide industries disclosed 388 specific cases of lead poisoning in 16 months, and 60 deaths from lead poisoning occurring in New York in 1909 and 1910. As a result of the disclosures laws were enacted during 1911 and 1912 in eight states—California, Connecticut, Illinois, Michigan, New York, Wisconsin, Maryland and New

Jersey requiring reports by physicians of all cases of certain occupational diseases occurring in their practice.

It is expected that the American Medical Association, working in conjunction with the Association for Labor Legislation will begin a nation wide effort to stamp out the use of processes which foreign experience has shown to be as dangerous as they are unnecessary.

OPPOSITION TO THE ESTABLISHMENT OF AN INDEPENDENT HEALTH SERVICE.—Hon. John D. Works of California, has sent us a 78 page reprint of his speech against the Senate bill to establish a genuine public health service. His arguments are the specious ones that the A. M. A. is trying to organize a medical trust, with the existing government medical services as willing tools, and in opposition to the rights of Christian Scientists, sectarians and the public generally. It is perfectly true that the organized medical profession is trying to be its weaker and less informed brothers' keeper and it is also true that any effort in this direction, for health or anything else, by any kind of an organization, interferes with what many consider the inalienable right of the citizen to run risks for himself and others and to oppose his own opinions against those of persons better able to judge. And it is also true that the same general spirit of legislating in favor of good morals, good health and economic welfare, has not always been directed wisely or sincerely and that it has resulted in a mass foll was which, in the aggregate, make this country less free for the private individual in carrying out his own personal inclinations, than almost any other highly civilized country in the world. This fact renders any task of reform, however well conceived, difficult. We agree with Senator Works' general premises but, disagree most heartily with his application of them to this particular case.

HAEMOGLOBIN EXAMINATIONS.—The Talqvist method of saturating filter paper and comparing with a standard is the most convenient and rapid and can be used by any one whose color vision is normal. Readings can be made with less than ten per cent. error—sufficiently accurate for clinical purposes and probably as accurate as most persons can accomplish with the more elaborate apparatus. A very important point is to compare fairly large areas of color. Modifications in which small areas are compared are liable to give misleading results. Readings should be made by day-light but not in bright sun-light. There is an old proverb not to look a gift horse in the mouth; but some of the color scales with which the profession has been presented are unreliable.

THE CIVIL WAR SURVIVORS.—According to Gen. Ainsworth's figures there were 2,128,948 men in the Union service during the Civil war, and of that number 1,726,353 were alive at the time of the grand review in 1865.

It is estimated that the survivors now number about 500,000. The mortality at present is at the rate of about 100 a day.

It is a remarkable fact that during the civil war period there were 844,801 volunteers 16 years of age or under in the Union army. But 16 was near the age limit, because there were only 1,523 who were 14 or under. Consequently nearly all the youngsters of the war period are now over 60 years of age. Far more survivors are beyond 70 than under 70.

Gen. Ainsworth estimates that by 1915 the Union veterans will number only 430,000, and only 250,000 in 1920 and only 37,000 by 1930. There are now living about 350,00 Confederate veterans. Of all those who enlisted on the one side or the other only one-fourth are survivors.

If we are correctly informed, the last two survivors of the Revolution, died within an hour of each other, in 1866, although there was some question as to the formal service of one of them.

The International Congress on Aerial Law, sitting in Geneva, has decided that, if a baby is born in an airship or aeroplane, it has to be registered on the ship's log or else a statement drafted concerning its birth. A copy of such statement has to be filed with the nearest public authority entitled to register births and deaths.

If the airship is flying in a foreign country a statement has to be left with the consul of the airship's nation.

Genesee Co. is agitating for a tuberculosis hospital.

New Inventions

Wilhelm Hiemenz and Walter Kropp, Elberfeld, Ger. Assignors to Farbenfabriken Vorm, Friedr Bayer & Co., Elberfeld, Ger. 1,026,914. Pharmaceutical Product.

L. H. Reuter, Tompkinsville, N. Y. 1,027,000. Composition for Disinfecting and other purposes.

B. B. Goldsmith, New York, N. Y. 1,027,131. Indurated Albuminoid Compound.

B. B. Goldsmith, New York, N. Y. 1,027,122. Indurated Casein Compound.

Louis Block, New York, N. Y. Assignor to Leah E. Block, New York, N. Y. 1,027,174. Earpiece-Disinfecter.

J. B. Sapp, Cleveland, Ohio. 1,027,216. Obtunder.

Geo. Merling and Hugo Kohler, Elberfeld, Ger. Assignors to Farbenfabriken Vorm, Friedr, Bayer & Co., Elberfeld, Ger. 1,026,691, 1,026,692. Process of Producing Isoprene.

J. M. Brandenburg, Elgin, Ill. 1,026,786. Corn Plaster.

W. H. Redington, Evanston, Ill. 1,026,830. Stopper.

A. J. Kier, Copenhagen, Den. 1,026,956. Apparatus for filling Tubes.

Edw. Dobartz & W. H. Sigley, Sylvan Grove, Kansas 1,027, 378. Funnel.

Robt. Liddell, Tecumseh, Nebr. 1,029,892. Hydrocarbon Burner.

H. T. Smith, Willis, Kans. Assignor to B. L. Cornelius, Hutchinson, Kansas, & A. V. Smith, Willis, Kansas,. 1,028,973. Oil Burner.

A. R. Swaine, Des Moines, Iowa. 1,028,976. Hydrocarbon Burner.

A. H. Schilke, Wilmerding, Pa. 1,029,031. Combination Burner and Blowpipe.

J. B. Cowper, Bayonne, N. J. 1,029,048. Oil Burner.

Alexander J. Rickie, Cossipur, Calcutta, India. 1,029,084. Gas Producer or Generator.

Emil Lampecht, Phila., Pa. 1,029,135. Gas Lighter.

L. A. Voell, Fund du Lac, Wis. 1,029,158. Igniting Device.

H. M. Doggett, Oakland, Cay. 1,029, 174. Oil Burner.

J. W. Aylsworth, East Orange, N. J. Assignor to F. L. Dyer, Montclair, N. J. 1,029,254. Non Inflammable Lubricating Oil.

A. I. Blanchard, Islington, London, England. 1,029,254. Vapor Burner.

C. W. Miles, Anderson township, Hamilton County, Ohio. Assignor to S. S. Miles, Greenboro, N. C. 1,029,309. Air and Gas Compressor.

R. L. Spaulding, Helena, Mont. 1,028,297. Sterilizer.

Arthur Zitcher and E. J. Rath, Offenbach-on-the-Main, Germany. Assignors to Corporation of Chemische, Fabrik Griesheim Elektron, Frankfort-on-the-Main, Germany. 1,028,521. Anthracene Derivatives and Process of Making Same.

E. I. McKesson, Toledo, Ohio. 1,028,582. Anesthetic-Administering Apparatus.

E. I. McKesson, Toledo, Ohio. 1,028,583. Rebreathing-Bag for Anesthetizing Apparatus.

G. F. Bridley, San Francisco, Cal. Assignor to The Rössler & Hasslacher Chemical Co., New York, N. Y. 1,023,857. Apparatus for Preparing Ozone.

Henry Howard, Boston, Mass. 1,028,880. Process for Making Sulfuric Anhydrid.

John Leach, Blackburn, Eng. 1,028,890. Medical Inhaler.

Joseph Rosenthal, Munich, Ger. 1,028,969. X-Ray Tube.

Chas. Endorf, Jr., Chicago, Ills. Assignor to Commercial Electric Motor Mfg. Co., Chicago, Ills. 1,028,999. Massage Apparatus.

Josef Stoger, Munich, Ger. 1,029,034. Obstetrical Device.

G. F. Jaubert, Paris, France. 1,029,064. Process for the Preparation of Hydrogen by Autocombustion.

G. L. Clarke, Brooklyn, N. Y. Assignor to The Eden Co. 1,029,105. Perfume Preparation.

Carl Bosch and Hans Keller, Ludwigshafen-on-the-Rhine, Ger. Assignor to Badische Anilin & Soda Fabric, Ludwigshafen-on-the-Rhine, Germany. 1,029,528. Process of Absorbing Oxids of Nitrogen.

Paul Hoering, Berlin, Ger. 1,027,844. Process of Making a Soluble Compound of Iron-Glycero-Phosphate Combined with Milk or Milk-Albumin.

Carl Von Linde, Munich, Ger. 1,027,862, 1,027,863.

Arthur Quenzer New York N. Y. 1,027,897. Ankle-Supporter.

C. C. Beamer, Steubenville, O. 1,027,976. Medicine-Spoon.

Albrecht Schmidt, Höchst-on-the-Main, Ger. Assignor to Farbwerke Vorm, Meister Lusius & Bruning, Höchst-on-the-Main, Ger. 1,027,441. Isolated Alkali Salts of Indoxyl and Process of Making Same.

W. G. Lindsay, New York, N. Y. Assignor to The Celluloid Co., New York, N. Y. 1,027,486, and various other numbers. Solvents for Acetyl Cellulose.

W. G. Lindsay, New York, N. Y. Assignor to the Celluloid Co., New York, N. Y. 1,027,617, 1,027,618. Solvent for Nitrocellulose.

G. D. Hazen, Brockton, Mass. Assignor to Hazen-Brown Co., Brockton, Mass. 1,027,728. Collapsible Tube.

Georg Zueler, Berlin, Ger. Assignor to Chemische Fabrik Auf Actien (Vorm E. Schering), Berlin, Ger. 1,027,790. Pancreas Preparation Suitable for the Treatment of Diabetes.

R. H. Davis, London, Eng. Assignor to Siebe Gorman and Co., Ltd., London, Eng. 1,027,823. Apparatus for Testing Air.

Bulletin of the Buffalo General Hospital

VOL. II.

JULY, 1912

No. I.

The Board of Trustees

AT the April meeting of the Board of Trustees, Mr. George R. Howard was elected president, to fill the vacancy caused by Mr. Pardee's death, and Mr. Carlton M. Smith was made vice-president. At the same meeting Mrs. Pardee was made a trustee.

Among the committees appointed during the past three months is one to consider the proper commemoration of gifts to the hospital and notable services rendered it. This is a point upon which there is need of action, and upon which the procedure of other hospitals throws little light. The endowed bed and endowed room are everywhere established, but at this point the hospital imagination wavers—perhaps through lack of occasion for wider flights. For with the exception of a few institutions in old communities, our American hospitals are poorly endowed; and they can make today a double plea for public support, for they supply generously the remedial needs of the moment, and they are centers of preventive work in their communities.

The trustees hope to work out a general scheme for making appropriate recognition of the varied gifts of money and service which have built up the General Hospital from the tiny beginning of more than fifty years ago. A memorial tablet to Mr. Pardee has already been voted.

The department of social service has also been under consideration. Its work is growing in scope and efficiency, and the question of its support is a serious one, as the resources of the Hospital do not permit any substantial diversion of funds to its needs. A fuller statement of its work will be found elsewhere in the Bulletin.

Under authorization from the trustees, the General Hospital cooperated with the Homeopathic and Children's Hospitals in a display at the recent Child's Welfare Exhibit. Nurses from the three institutions were in attendance in turn during the exhibition hours. The General Hospital showed a series of photographs of the Harrington and of groups of its inmates, and there was also a pictorial representation, doll-house size, showing the superiority of hospital care for the sick child over that given him at home. The invalid doll lay in a squalid room, which

it shared with a number of other dolls, actively employed, and with two dogs, of truly terrifying size in comparison with the human members of the family group. An adjoining compartment showed the invalid in a hospital cot, attended by an immaculate nurse. The moral could be read by those who ran: it was "better" at the hospital, but more sociable at home.

Superintendent of Nurses

The resignation of Miss Rye Morley as Superintendent of Nurses, which the Hospital administration accepted with much regret, went into effect July 1st. Miss Morley has been at the General Hospital for four years—two years as first Assistant Superintendent of Nurses, and for the last two years at the head of the Training School. In September she takes the corresponding position at Mt. Sinai Hospital in New York, an institution with accommodations for five hundred patients, and a school of one hundred and seventy-four nurses. Miss Morley was recently appointed a member of the State Examining Board for Nurses, but declined the appointment.

Her successor at the Buffalo General Hospital is Mrs. Mabel McDonald, a graduate of the Hospital's training school, who has filled the exacting position of Night Supervisor of Nurses there for the past year.

The Hospital may well look with satisfaction upon the number of its graduates who are filling responsible administrative positions. Including such positions at the General Hospital itself, twelve of its graduates are engaged in important institutional work in Buffalo; six are superintendents of hospitals in smaller cities, five are in New York hospitals, and four in Brooklyn—two of these four as assistant superintendents.

Gifts

At the April meeting of the Board of Trustees a check of \$10,000 was received from Mrs. Pardee, as a gift from Mr. Pardee, endowing one of the semi-private rooms. This establishes a new class of endowments at the hospital, and is a most fitting memorial of Mr. Pardee, as he felt that the semi-private rooms met the needs of a class of patients very inadequately provided for by our hospitals.

Another free bed has been provided in the maternity service at the Harrington, through the generosity of Mrs. W. Austin Wadsworth of Geneseo.

The bequest of \$1,000 from Mr. William Pryor Letchworth has been received. It is to be added to the general endowment fund.

Commencement

The graduating exercises of the Training School were held, as usual, on the twelfth of June, in the Nurses' Home. The opening prayer was by the Rev. W. Hamilton Benham, and the address of the evening by Mr. Mellen of the Lafayette High School. The diplomas were presented by Dr. Ward Plummer, and the badges of the hospital by Mr. Howard, president of the Board of Trustees. The music for the exercises themselves was furnished by the choir of Westminster Church, and for the reception afterwards by Kuhn's orchestra. The usual dance was omitted, out of respect for Mr. Pardee's memory.

The class this year numbers eighteen members, half of whom are Canadians. This was the percentage in last year's class also.

For the most part, this year's graduates intend to devote themselves to private nursing; one, however, enters the School of Health and Nursing at Columbia University, to prepare herself for teaching. A second, also, may take up teaching later.

The Social Service Work

The most recent development in the social service work has been its concentration into three general divisions—the work for convalescents, the child welfare work, and that in connection with the maternity ward. Each division is under the special supervision of one worker, and there is no question but that more ground is covered and better work done by such specialization. The result is shown in eight or nine cases in the maternity ward in place of the former two or three, and of double the number of children's cases. The plan is to extend the work by the help of volunteer workers, under special supervision.

The work for convalescents consists, in the main, in prolonging the period of rest, either by utilizing Buffalo's scanty provision for such cases, or by securing country board for them; or sometimes a change of occupation may be required, or the finding of some light work for the handicapped. A most important work for patients leaving the hospital is often to keep them in touch with dispensaries or with private physicians, as their case demands. The patient who needs this sort of following up is not infrequently one with a high appreciation of what the hospital has done for him; after its magic touch, what more can be needed?

The child welfare work begins in the wards with kindergarten instruction, and often secures the temporary transfer of a child to a good boarding home, in cooperation with the Superintendent of the Poor's country department for children. Ignorant mothers

are taught, at home, something of hygiene and proper feeding. The work in the maternity ward is perhaps the most urgent of all. Sometimes it takes the form of council and temporary relief, which enables a woman with a family to take advantage of the hospital care; sometimes legal aid must be secured for a deserted or unsupported wife. The unmarried mothers constitute a difficult and delicate class to deal with, often taxing heavily the resources of the workers. In the past year thirty-nine maternity cases were referred to the social service department.

During this beginning period, the District Nursing Association has been the staff upon which this department has leaned, and the social work can reach no degree of prosperity in which it will not need the Association's cooperation and its counsel.

For the furtherance of all the interests involved, an executive committee has been appointed, in accordance with the action of the Trustees, noted in the last Bulletin, one of whose duties shall be to reach the public interest, without which work of this kind cannot prosper. The support which it needs can be counted upon with confidence, when its intent and its scope are understood.

PLASMODIAL ANEMIA.—In spite of the modern theory of the etiology of malaria and malarial affections (mosquito-borne infection) this plasmodial disease continues to be rife in certain sections of the country and bids fair to be, like "the poor," "always with us."

Every physician of experience appreciates the principles which should guide him in the treatment of various acute manifestations of paludal poisoning, i. e., the destruction of the plasmodial hosts which have invaded the blood and which if not eliminated, consume and destroy the red cells, the vital element of the circulating fluid.

When this purpose has once been accomplished the patient is but partly cured; the damage done to the red corpuscles must be repaired and the vitality of the blood restored, if re-infection is to be avoided. If there is any one condition in which direct hematinic or blood-building therapy is positively indicated, it is in Post-Malarial Anemia. As soon as the febrile period has passed, iron, in some form, should be given in full dosage. Pepto-Mangan (Gude) constitutes the ideal method of administering this essential blood-building agent in this as well as in any anemic condition. Both the iron and manganese in Pepto-Mangan are in organic combination with peptones and are therefore easily and promptly absorbed and assimilated without causing digestive derangement or producing constipation.

BUFFALO MEDICAL JOURNAL

A Monthly Review of Medicine and Surgery

EDITOR

A. L. BENEDICT.

All communications, whether of a literary or business nature, books for review and exchanges, should be addressed to the editor, 354 FRANKLIN STREET, BUFFALO, N. Y. Please make personal or telephonic calls before 1 p. m.

THE BUFFALO MEDICAL JOURNAL will publish regularly, full transactions of any professional organization in western New York at cost. Personal notices, brief reports of society proceedings, and the like, are always welcome and will be published without charge.

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JULY, 1912

No. 12

The dollar is measured by its purchasing power. Do not let it buy of you anything that you can not afford to lose.

Policewomen

The advocacy of policewomen originated with Mrs. Julia Goldzier, of Bayonne, N. J., and we understand that such a force has actually been put into service in Los Angeles and Indianapolis and some other western towns. Mrs. Goldzier's idea is, at the beginning, to confine this service to public play grounds, including parks, the vicinity of schools at the time the children are congregating or dispersing to their homes. After a thorough practical test has been made, other much wider fields for the service may develop, not only in the geographic sense but in regard to the extension of the duties of the policewomen to cover more serious misdemeanors than children's quarrels and petty acts of dishonesty.

The gist of Mrs. Goldzier's argument is that children are as valuable to the state as property, quite as much in need of protection as the latter, that women are required to guarantee this protection. The first two points will readily be admitted; the only difference of opinion being with regard to whether children require special oversight beyond that provided by parents, teachers and other existing agencies, and whether the present male police force can adequately provide such oversight. With the inevitable tendency to concentration of population, carrying with it a greater and greater restriction of private play grounds, it is obvious that more and more of the necessary outdoor life of the child and, more particularly the child of the

tenement district must be spent in the public streets, parks and play grounds. That the child needs guarding against physical risk, against moral contamination, and against the insidious development of criminal tendencies, even against kidnapping, seems to us to require no further argument than observation and study of reports of crime. As to whether the parent, the teacher and other existing guardians of the child can provide the necessary supervision throughout the entire day, we need only ask the reader of more than average circumstances, whether his own child is protected for the entire period of risk and then reflect on what the conditions must be for the child of the already large and constantly increasing class in which both parents must be wage earners, or in which the domestic duties of the mother are so heavy as to preclude much attention to children after their early infancy.

It may, of course, be argued that the existing male police force is all that the state should provide to prevent law breaking by persons of any age and to breed a respect for law and for its underlying moral principles. Here again, actual observed facts are more eloquent than theory. The fact is that children in the most impressionable period of their development do not come within the jurisdiction of the policeman, to any adequate degree and, if we pause to consider the reason, we must acknowledge that the present police force exists largely as a preliminary punitive arm of the law, to deal with actual offenses rather than tendencies toward crime and that, without losing prestige and efficiency, it cannot, even allowing for necessary numeric increase, deal with the petty quarrels of children or supplement the moral training of the school and home, except incidentally and occasionally.

Mrs. Goldzier anticipates a good many arguments of those prejudiced against the extension of woman's work. The arguments on both sides are too familiar in these days to need repetition.

Segregation of the Tuberculous

DR. HARVEY D. WILEY has suggested, how seriously we do not know, that all tuberculous persons should be isolated on some island. His suggestion is criticized as not in accord with the principles of humanity. Having personally made practically the same suggestion, quite a number of years ago, and probably with the same realization as Dr. Wiley, that it is not feasible at present, it may not be out of place to raise some questions as to its merits and demerits.

As to the humanity of the proposition, we can appreciate

fully that the removal of a tuberculous patient from his home may occasion considerable suffering. For this suffering, we have every sympathy; nostalgia is no laughing matter. On the other hand, it must be conceded that there is no more essential cruelty in isolating a tuberculous than leprous patient and no more in sending a consumptive from home as a matter of prophylaxis than of therapeutics. It is not to be supposed that the isolation of all tuberculous patients would be done with brutal disregard for their comfort, any more than that this should be the case for some consumptives. On the contrary, compulsory, general quarantine would, as a matter of common sense and common humanity, imply a careful assortment of cases according to location, stage and other features of the disease, the most expert attention to therapeutic indications and the utmost pains to alleviate the suffering of hopeless cases.

Those who condemn isolation on humanitarian grounds forget one very important fact. Under present methods, a great many patients receive practically no care at all until confined to bed in the last stage of the disease; there is no efficient means to discipline them so as to afford a reasonable chance of cure; on account of poverty, many lack scientific treatment and even good nursing, however much they may enjoy the love and companionship of their homes; even from the sentimental standpoint, dying at home is balanced by many apprehensions as to the safety and future welfare of the family. Imagine, on the other hand, that compulsory isolation of the tuberculous were a fact. It would obviously operate as early as a case could be detected and the self interest of the community would render concealment of cases very difficult. The present mortality, is probably 90%. In carefully managed series of early cases, it is somewhere about 50%, certainly not higher than 75% and according to some reports, as low as 25%. There is no reason why, allowing for the first embarrassment of providing accommodations and care for a sudden large influx of patients, the same saving of life could not be effected for patients sent to suitable places as a matter of safety for the community as for those sent, under present conditions, for their own sake. The enormous aggregate saving of life, preservation of families, and restoration to more or less robust health strikes us as being essentially humane, even if contrary to the preferences of the patients. Critics on the humanitarian side forget that, after the first year or so of the operation of a compulsory isolation law, it would apply only to a very small minority merely sent away to die in the interests of survivors. The great mass of those affected by such a law, after its inception, would have an exceedingly good chance of recovery.

Let us consider the proposition now, solely as a matter of prophylaxis. The great majority of all cases of tuberculosis in man are due to the human variety of the bacillus. Probably not more than 5 or 10% are due to the bovine type and the risk of infection of human beings from bovine sources has been shown to be comparatively slight, though not nil, as was at first claimed by Koch or, at least, by his interpreters. There are certain cases in the lower animals due to the human variety of the bacillus but these occur mainly in domestic animals closely associated with human patients and the prophylaxis depends mainly upon the disposition of the human case. In other words, the great majority of human cases of tuberculosis, are due to previous human cases.

The tubercle bacillus, though wide spread, is a comparatively feeble organism, killed by sunlight in a few hours, killed by diffuse daylight within a few weeks, fairly amenable to control by cleansing and disinfectant treatment of fomites. The great majority of persons are fairly resistant to it in a state of ordinary health, provided the infection is not massive. In other words, if the human sources of infection could be removed, opportunities for further infection could, for the most part, be quickly removed and such cases as did occur from fomites overlooked, would decrease in geometric progression.

A very important detail is that, with the tuberculous patient out of the way, not only would disinfection be much more feasible but persons still exposed to persisting fomites would be enabled to avoid the fatigue, confinement and reiterated dangers of implantation of bacilli, which now lead to the development of cases in the wake of another.

The problem is further simplified by the fact, or at least, apparent demonstration by experience that the "striking distance" of the tubercle bacillus is not great. That is to say, the suggestion of an "island" for the isolation of the tuberculous, is merely a figure of speech. There is no need of calculating the size of an island at an enormous distance from the normal population, where all tuberculous patients may be isolated. The problem may be reduced to convenient units of population and suitable locations are available, at no prohibitive expense, and within at most a night's ride of practically any point in the country. While isolation should be isolate, it seems to be true that no tremendous distance of water or land, need intervene between a colony of tuberculous patients and ordinary settlements. With such reasonable care as to wind-borne and water-borne infection as can easily be carried out in a colony, there seems to be no appreciable danger even to those in close proximity. Moreover, with strict

precautions, even the attendants run little risk and isolation need not necessarily preclude brief visits from friends.

The more we think about the proposition, the more it impresses us as worthy of practical consideration. We should be glad of an expression of opinion from our readers.

OUR CONTEMPORARIES

THE undersigned publisher edited in this form a Monthly Bibliographical Review international journal for the whole literature of medicine with the collaboration of numerous savants from home and abroad, edited by the bibliographe H. Albert-Helmers, chief editor, annually 12 numbers (1 volume of 100—120 sheets); monthly 1 number of 8—10 printed sheets. Mk. 30.—.

The enorm value as far as concerns especially the second part (periodic literature) particularly will without a doubt being appreciated by every medical man. Actually it is not possible to the savants of medicine being informed exactly about all publications worth knowing, for the literature of medicine comprehends such an extended domain that a surgeon cannot know all that having been edited or being still published, even not in the special domain, which coming in question for the savants individually.

Also, he d'ont find in the special libraries of medicine all the principal periodicals necessities being informed of all the new publications.

The "Monthly Bibliographical Review" edited by the undersigned publishing office gives the index of all the most important medical newspapers of the world.

The "Monthly Bibliographical Review" supplies a want considering that numerous societies of medicine have answered to the inquiry of the editor "that they would gladly patronise such a journal," "that the edition of such a mensual review would be a loudable enterprise," etc., etc.

The underwriter may with right pretend that a journal of the kind as edited by him does not exist in the whole world. Even the library of the Surgeon General's Office U.S.A. Army in Washington (the most important library of the world edited well an "Index Catalogue," but this gives only the new publications in books, phamplets, dissertation, periodicals, etc., but d'ont indicate the articles of the different journals of medicine.

The undersigned publisher would be very agreeable also, to get your order on the "Monthly Bibliographical Review" as soon as possible and remain, dear sir, with compliments, yours faithfully,

Publisher of Monthly Bibliographical Review.
RETTIG & KOLLMORGEN,

PERSONAL

Dr. Mott Moore and Dr. Joseph Roby are in charge of the Rochester Infants' Summer Hospital, situated on the lake shore at Charlotte. The staff recently appointed consists of Drs. Orchard, Witherspoon, Wesley, Mulligan, E. W. Mulligan, McDowell, Hanes, Fitch, Ruggles, Snell, and Richards.

Dr. Edward B. Angell made the address to the graduating class of the nurses' training school of the Rochester State Hospital, June 12, 1912. The class consisted of 11 women and 1 man. Dr. E. H. Howard, Superintendent, and Col W. C. Sanger and Dr. J. V. May, of the State Hospitals Commission spoke to the class and presented the diplomas.

Dr. Spencer L. Dawes, of the special commission named by the Governor to investigate the alien insane situation, took testimony at the Willard State Hospital on June 11 and at the Rochester State Hospital on June 12, 1912.

Dr. Leonard W. Jones has removed his office to 53 S. Fitzhugh St., Rochester.

The property of the Denniston (automobile) Co. has recently been sold to Dr. E. J. Meyer of Buffalo.

On June 27, 1912, Dr. Joseph S. Lewis of Buffalo, was married to Miss Isabelle St. Clair Denny, at Charlotte, N. Y.

The recent collapse of a dock at Eagle Park, Grand Island, near Buffalo, resulted in about 40 deaths by drowning. Dr. George B. Stocker, the post mortem examiner, rendered efficient service. Dr. Frederick E. Sperry of Florida St., Buffalo and Dr. M. C. Vaughan an interne in the Buffalo Hospital of the Sisters of Charity, helped to save lives. Charles A. Seward, an interne at the State Hospital, Buffalo, nearly lost his own life insaving his wife and child.

Mr. August Schneider, clerk of the Buffalo Health Department, has retired from the position of Drum Major of the 74th Regiment, receiving an honorary lieutenancy. He is succeeded in the regiment by William Witte formerly of the Kilties' Band. Mr. Witte is seven feet, two inches in height, and is one of the tallest men in the world, if not the tallest drum-major. Just the same, a new generation will have to grow up before Buffalo

will cease to miss Mr. Schneider. Our best wishes to him and apologies for designating him other than more familiar and endearing nick-name.

Dr. Max Carl Breuer of Buffalo, and family, will spend the summer in European travel.

Dr. John R. Williams of Rochester, whose departure for Europe was announced in the June issue, informs us that pressure of work has made it necessary to postpone his trip till next year.

Dr. S. P. Jewett has recently opened an office on West Chipewa St., near Delaware Ave., Buffalo.

Dr. A. E. Forsyth of Buffalo, was in New York late in June.

Dr. Otto R. Eichel of Buffalo, has been appointed Superintendent of the J. N. Adam Hospital at Perrysburg, at a salary of \$2,000.

Dr. Amos J. Givens of Stamford, Conn., was awarded the degree of LL.D., by Wesleyan University of Middleport, Conn., June 19.

Dr. Max Breuer sails for Europe July 18th, to spend some time in Paris, Munich, Heidelberg and Berlin. He will visit the cancer research hospitals in Germany and attend the international congress for Gynecology in Berlin in September.

Drs. S. Case Jones, W. W. Percy, C. O. Boswell, E. W. Kennedy, R. D. Richman and Frederick W. Seymour are the Rochester National Guard men attending the Military Medical School at Peekskill, June 22 to 29.

Dr. L. Emmett Holt of New York, was in Rochester for several days attending the meetings of the Board of Trustees of the University of Rochester of which he is an alumnus.

Dr. Henry H. Covell of Rochester, has just returned from the Chicago Republican Convention.

Dr. Henry T. Williams of Rochester, has returned from Newport, R. I.

Dr. W. S. Grimes of Detroit, has moved to 66 Pasadena Ave.

Dr. R. Montfort Scheey of Buffalo, read a paper at the American Institute of Homoeopathy at Pittsburg, in June.

Unknown persons borrowed Dr. Henry Adsit's (Buffalo) automobile from in front of the 74th Armory, June 18. The automobile was found the next day, uninjured.

Dr. Edward J. Meyer of Buffalo, has been elected president of the board of managers of the Public General Hospital, to be erected later.

Dr. Earl P. Lothrop has purchased the Lexington Heights Hospital of Buffalo. The present building will be moved to the rear of the lot remodeled into a nurses' home and a modern hospital will be erected.

Dr. John F. Fairbairn of Buffalo will spend the summer in Europe.

Dr. Loren H. Staples of Buffalo, was in Toronto during the last week of May.

Dr. William Gaerner of Buffalo, attended the 10th annual meeting of the United German Societies of New York, in New York City, May 28.

Dr. N. Victoria Chappell of Buffalo, sustained a simple, multiple fracture of both bones of the leg, early in May, due to strain in slipping and endeavoring to recover her balance. Her presence of mind in resisting well meant first-aid, undoubtedly prevented the fracture from becoming compound, as she insisted in lying where she fell until temporary splints could be applied. While the case is progressing favorably, Dr. Chappell is still confined to the house.

Dr. George S. Dickinson, formerly of Erie, Pa., who has been taking post graduate courses in New York, called on the editor early in June.

Dr. A. Crandall Way of Perry, N. Y., formerly of Buffalo, was in Buffalo last week.

OBITUARY

DR. LEROY WENDELL KING of Lowville, N. Y., died at the Ogdensburg State Hospital on May 29, aged 37, four weeks after an appendix operation. He was graduated at the University of Michigan, 1899, and was President of the Lewis Co. Medical Society.

DR. EDWIN L. WOOD of the staff of the Jackson Sanitarium, Dansville, died in Beausoleil, France, June 2, aged 51. He was a graduate of Buffalo, 1888. We regret the lack of definite data for a more extended notice of our classmate. We can only say that he was a diligent student, a conscientious practitioner, and a noble man.

DR. PIERCE J. O'BRIEN of Troy, died May 26, aged 38. He was a graduate of Albany, 1898.

DR. ROLLIN THOMAS ROLPH of Chula Vista, Calif., died at the Agnew State Hospital, Calif., May 15, aged 60, of pernicious anaemia. He was a graduate of Buffalo, 1873 and formerly practiced in Dunkirk and Fredonia.

DR. DEXTER R. BELDING of Malone, N. Y., died May 18, aged 66. He was a graduate of Cleveland University of Medicine and Surgery, 1869.

DR. NEWTON M. COLLINS of Rochester, died June 22, aged 52. He was born at Rose, Wayne Co., N. Y., graduated at the Hahnemann Medical School of Philadelphia, 1883 and had since practiced in Rochester. He was surgeon to the Rochester Homeopathic Hospital and consulting surgeon to the Batavia Hospital. Besides filling many minor positions of honor, he had been president of the State Homeopathic Society. He had recently purchased the Sargent residence on East Avenue and was engaged in fitting it up as a surgical office, when seized with his last illness. Ten weeks ago, he developed typhoid fever and was apparently convalescent when emergent symptoms required an operation. This revealed a rupture of the right common iliac artery, at the site of an aneurysm. He died the same day. Dr. Collins was a progressive surgeon, in close personal touch with the Mayos of Rochester, Minn., and active in professional interests. His death is mourned as a personal loss by his colleagues.

CORRESPONDENCE

No. 195 Madison Avenue,
Albany, N. Y., May 11th, 1912.

Dr. A. L. Benedict,
Buffalo Medical Journal,
Buffalo, N. Y.

My dear Doctor:—

I always enjoy looking over the pages of your bright JOURNAL, and as an old soldier I like reading the installments of the interesting "Notes of Civil War Army Life" depicted by our lamented friend, Colonel Potter.

I keep in touch with medical affairs, have affiliated with the Albany County Medical Society from Erie County, of which I was a member from 1897.

Wishing the JOURNAL every success and with regret that circumstances took me away from Buffalo,

Truly Yours,

JOHN H. GRANT, M. D.

BOOKS AND AUTHORS

The Building Code and Tuberculosis Prevention. 13-page pamphlet, by the Committee on the Prevention of Tuberculosis of the C. O. S. of the City of N. Y.

This is a most interesting discussion, although, naturally, applicable rather to problems of the metropolis and other large cities than to the smaller cities and villages of our especial territory.

There is one point in connection with this general subject that ought to be emphasized. When a building has been erected in good faith, in accordance with laws and accepted principles of architectural hygiene, that building should be left unmolested, barring minor changes in spite of revised laws, advance of sanitary science and architecture, and subject to ordinary conditions of supply and demand, to determine remodeling or adaptation to other than the primary use designed. To compel premature destruction or extensive rebuilding amounts to confiscation and, however desirable from the standpoint of philanthropy, will ultimately cause so serious a check upon investment and improvement of vacant property as to defeat the general object of building laws intended to safe-guard the health of occupants. If radical interference becomes necessary, the investor should be reimbursed, on exactly the same principal of ethics as governs

compensation for condemned cattle, the condemnation of property for grade crossings, parks, play grounds, etc.

Progressive Medicine, Vol. 14, number 2, June 1, 1912. Edited by Drs. H. A. Hare and L. F. Appleman, Philadelphia; Lea & Febiger publishers. Quarterly \$6 per year.

This number includes Hernia by Dr. Wm. B. Cooley; Surgery of the Abdomen exclusive of Hernia, by Dr. John C. A. Gerster; Gynecology by Dr. John G. Clark; Diseases of the Blood, Diathetic and Metabolic Diseases, etc., By Dr. Alfred Stengel, Ophthalmology by Dr. Edward Jackson. The general excellence of the series is maintained and the criticism occasionally made that reviewers write an original article expressing their own views and experience is not applicable here.

Report of the Pathologic Department and the Department of Clinical Psychiatry, Central Indiana Hospital for Insane. Vol. 4, 1909-10 and 1910-11, Indianapolis. 344 pages, illustrated.

Very little of this work is devoted to routine reports but every effort has been made to present concise statistics from which practical conclusions can be drawn. A good suggestion for reports in various fields of medicine may be derived from the way in which the necropsies are tabulated. For example, under such headings as acute mania, chronic mania, melancholia, etc., we find such statements as these: Acute Mania, 9 cases, males 5, females 4, (race and age statistics, duration of residence and cause of death for each) then, under each anatomic system, the incidence of each particular lesion is noted, with reference to detailed necropsy reports by number. Nervous system, scalp, congested, 1; cranial bones thin, 2; absence of diploe, 2; cerebrum congested, 1; the case numbers showing clearly, that the first and last abnormalities were associated in the same case and that the cranial bone abnormalities were associated in each of two other cases. This matter of association of abnormalities is very important and is often not indicated in reports or statistics are given in such a confusing way that, in attempting to compute percentages, we find that individual lesions add up to, say 131% of a suppositious total. Here we see at a glance that 2-3 of the cases of acute mania showed no nervous system lesions at all. It is just such impartial, clear-cut reporting of actual findings as are here given that will solve the problem of the pathologic basis of cerebral clinical diseases. To the Superintendent, Dr. George F. Edenharter and his able staff, are due the thanks of the profession both for the actual facts, positive and negative, bearing on record which may be readily adapted to reports in very different their views and experience, is not for establishing a form of

this problem; and also for establishing a form of record which may be readily adapted to reports in very different fields of medicine.

The Practical Medicine Series, comprising ten volumes on the year's progress in medicine and surgery. The volumes are issued approximately monthly and each, dealing with a distinct field of medicine and surgery, is complete for the year previous to its publication. General Editors, **Gustavus P. Head** and **Charles L. Mix**, of Chicago; The Year Book Publishers, Chicago. Price of the series, \$10.00 or each volume may be purchased separately. Vol. 1, **General Medicine**, edited by **Drs. Frank Billings** and **J. H. Salisbury** of Chicago. 404 pages, \$1.50. Vol. 2, **General Surgery**, edited by **Dr. John B. Murphy**, Chicago, 616 pages, \$2.00.

Common Disorders and Diseases of Childhood. **George Frederic Still**, M.A., M.D., F.R.C.P., London. Oxford University Press 1912. 813 pages, illustrated, \$3.50.

As this is the second, revised edition of a work already familiar to the profession, a brief review is sufficient. Dr. Still emphasizes no particular part of the subject, introduces no novel features, makes no claim for the presentation of phenomenal cases. His book is sane, conservative, thorough, concise in its wording, reliable in its statements.

Home Nurse's Handbook of Practical Nursing. A manual for use in home nursing classes, in Young Women's Christian Associations, in schools for girls and young women, and a working text-book for mothers, "practical" nurses, trained attendants, and all who have the responsibility of the home care of the sick. By **Charlotte A. Aikens**, author of "Hospital Management," "Hospital Training School Methods," "Primary Studies for Nurses," "Clinical Studies for Nurses." 12 mo. of 276 pages, illustrated. Philadelphia and London; W. B. Saunders Company, 1912. Cloth, \$1.50 net.

The above clearly indicates the scope of the work and we need only add that the difficult task has been skillfully accomplished.

Cyclopedia of American Medical Biography. Cyclopedia of American Medical Biography. By **Howard A. Kelly**, M.D., Professor of Gynecologic Surgery at Johns Hopkins University, Baltimore. Two octavo volumes averaging 525 pages each, with portraits. Philadelphia and London; W. B. Saunders Company, 1912. Per set: cloth, \$10.00 net; half Morocco, \$13.00 net.

The period covered by this monumental work is 1610-1910. The author has wisely excluded living men, however famous. While obviously such a review is largely a work of compilation, Dr. Kelly has had the advantage of personal acquaintance with many of the men listed and in this way, has secured the knowledge necessary to a proper selection, from earlier biographic literature. Doubtless individuals will criticise the inclusion of some names,

and deplore the omission of others but in no case can the author be accused of a personal bias. For example, we miss the name of Dr. Thomas Starr, the immigrant ancestor of many persons of that name—and of other surnames—in this country and Canada, who died in 1658, and also another name in which we have no personal interest—that of René Goupil, a brave young medical student who accompanied and shared the martyrdom of some of the Jesuit missionaries to Canada and New York. We are inclined to think that all of the pioneer physicians of what is now the United States and Canada should be included in such a work and feel confident that Dr. Kelly will welcome notes concerning them for use in a future edition.

MISCELLANY

The U. S. Government has forbidden the importation of absinthe after Jan. 1, 1812 on account of the demonstrated harmfulness of its use as a beverage. A recent bulletin of the Dept. of Agriculture, describing native plants of medicinal virtues, with the idea of stimulating the industry of collecting them, lists absinthe as having been early introduced into this country and as now being a natural product. Absinthe is a fairly useful drug of the old-fashioned kind but, obviously, something more than prohibiting its importation will be required to prevent its use as a tipple.

There are now 400,000 automobiles in the country, as against 3,500 for 1901. More than a billion dollars has been paid for them in ten years and their cost, both initially and in up-keep, exceeds that of our navy, which it is the fashion to denounce as an extravagance. About one family in 40 has an automobile. Nowhere near this proportion felt that they could afford a carriage and team. The mileage and time spent in transit has been enormously increased. Many amateur economists claim that the automobile is responsible for our hard times. On the other hand, the money liberated by deaths caused by automobiles which affects mostly the well-to-do class numbering approximately one two-hundredth of the population, has probably acted to postpone financial stringency. The automobile mortality, by the way, is almost exactly equal to that caused by railroads and street cars together, although the part of the population affected is very much smaller.

Yellow Medicine

Motion pictures will be used to further the anti-tuberculosis campaign. One of these is about as follows: The villain is a heartless boss, in whose neglected tenements, a number of cases arise. His wife contracts the disease from nursing one of these on ship board. There is no room for her in any private sanitarium. (Here would be a good place to throw on the screen the advertisements of a dozen or more excellent ones. Ed.) The distracted husband tries to bribe the secretary of the society to make a place for her but there is no public institution because the boss has voted against it. (How about Raybrook and others?) The bribe is accepted, however, and a bunch of red cross stamps handed over. The husband is angry. (We don't blame him.) But he is later touched when the work of the association is explained to him—\$150,000. Then he is shown a tuberculosis exhibit and everything ends happily with the wife and tenement house children restored to health and the boss's candidate supported because of his pledge to the establishment of a tuberculosis hospital.

We are most heartily in favor of the work to limit tuberculosis and believe thoroughly in education of the masses but we can't enthuse over this kind of cheap cinematograph vaudeville. In the long run, truth and dignity are better weapons than exaggeration, graft and appeals to prejudice.

Wisner R. Townsend, New York City. *New York State Journal of Medicine*, June, 1912, quotes the following statistics of INFANTILE PARALYSIS from the Massachusetts Report of 1910, analysing 200 cases

Time of intitial Paralysis.	Cases.
Same day	20
One day	31
Two days	40
Three days	34
Four days	15
Five days	11
Six days	11
Seven days	14

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the balance occurring at different periods up to the eighth week. The permanency and the extent of the paralysis are also matters of great importance. The early paralysis may involve many muscles which subsequently recover more or less completely or the primary paralysis may involve a few muscle groups or single

muscles which may or may not remain paralyzed. Cases where the paralysis appears in one portion of the body at one time and in another at a subsequent time are infrequent; as a rule the primary paralysis is more extensive than the permanent.

Type of deformity:

Drop foot	6	
Genu recurvatum	25	
Talipes varus	3	
Talipes eq. varus	3	
Talipes valgus	9	
Talipes calcaneus	7	
Talipes calcaneo-valgus	2	
Talipes equinus	14	
Lateral curvature	2	
Drop wrist, etc.	1	
Weakness abdominal muscles	3	
Right valgus	}	1
Left calcaneus		
Right drop	}	1
Left valgus		
Multiple deformities	3	
Distribution of early paralysis:	Cases.	
One leg only	145	
Both legs only ..	146	
One arm only	44	
Both arms only	12	
One arm and leg, same side	50	
One arm and leg, opposite sides	18	
Both legs and one arm	32	
Both arms and one leg	8	
Both arms and both legs	51	
Ataxia (transitory)	7	
Back	79	
Abdomen	38	
Neck	13	
Respiration	39	
Deglutition	12	
Intercostal	1	
Face	7	
Right face	31	
Left face	24	
Strabismus	2	
Not stated	32	

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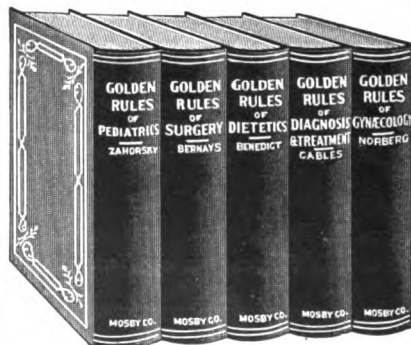
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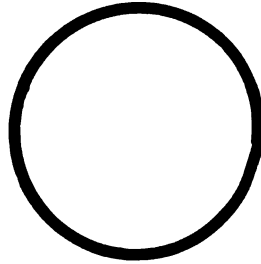
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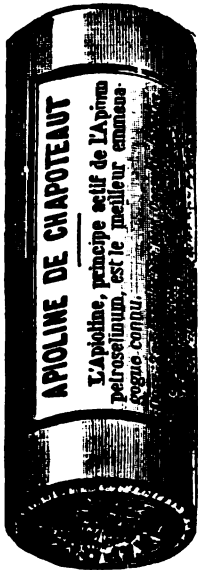
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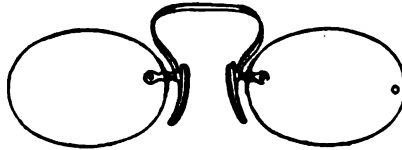
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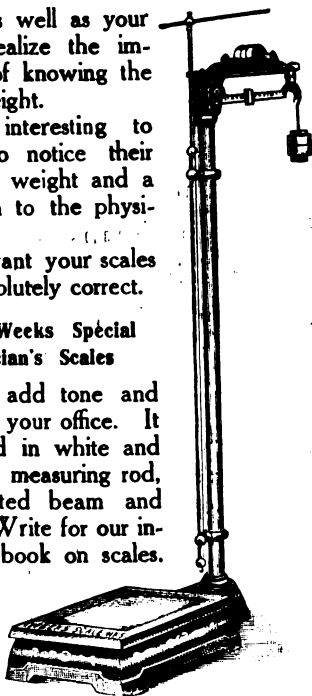
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(Continued from page xxii)

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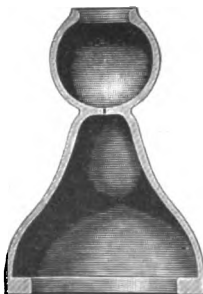
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